



# AMERICAN BEE JOURNAL



S. N. JENKINS AND SON AT SOUTHWEST END  
OF BEE YARD.



MR. AND MRS. JENKINS, WITH SWARM.  
(See page 751)



# American Bee Journal



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**GEORGE W. YORK & COMPANY**

334 Dearborn Street, Chicago, Ill.

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Goes to press Monday morning.

**National Bee-Keepers' Association****Objects of the Association.**

- 1st.—To promote the interests of its members.
- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

**Annual Membership Dues, \$1.00.**

General Manager and Treasurer—  
N. E. FRANCE, Platteville, Wis.

If more convenient, Dues may be sent to the publishers of the American Bee Journal.

**65c for 12 Names** For names and P. O. of 12 farmers and 15c stamps taken—we will send for 2 yrs. the Farmer's Call—reg. sub. price 40c a year. F. C. is a wkly., 25 years old, 1,300 pages a year. Sample free.  
FARMER'S CALL, Quincy, Ill.

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on the market to-day. Covers and bottoms are of **One Piece**. Everything is **Polished** on both sides, and a better case cannot be had at any price.

We can furnish them in single or car-load lots to fit any number or style of section. Large quantities of all the standard sizes on hand.

As a special offer, we will sell you 25 cases to hold 24 sections, complete with **Nails, Paper and Glass**, at \$4 00. Write for prices on larger quantities. Can furnish corrugated paper if desired.

We can furnish you with anything you need in the apiary. Our Catalog is free.

**Prompt Shipment and Satisfaction Guaranteed****Minnesota Bee-Keepers' Supply Co.**

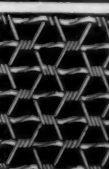
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Made of High Carbon coiled wire. We have no agents. Sell direct to user at factory prices on 30 days free trial. We pay all freight. Catalog shows 37 styles and heights of farm and poultry fence. It's free. Buy direct. Write today

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**There is a Reason for This**—It is because DITTMER'S FOUNDATION is tough, clear, and transparent, and has the natural odor of beeswax.

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Our warehouse is well stocked with all kinds of Bee-Keepers' Supplies. Beeswax always wanted.

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**FRICITION TOP CANS  
FOR HONEY AND SYRUP**

We will stamp your Cans "PURE EXTRACTED HONEY"—FREE

Our prices for 1906 are the lowest to the National Bee-Keepers' Association. Write us.

Now is the time  
TO BUY

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# American Bee Journal

## The Sweet-Toned Epworth Piano



A Piano good enough for these musicians, is good enough for any one

**Prof. E. O. EXCELL**

*whose music is sung around the globe*

"The Epworth piano I bought of you for my home is a superior instrument. There is a clearness, depth and richness in its tone which is particularly pleasing. I can safely recommend the Epworth to my friends."

**Prof. CHARLES H. GABRIEL**

*well-known composer of Sunday School music*

"For years I have used the Epworth in my studio, and now I have bought another for my home; they are exceptionally sweet-toned instruments. I feel that I can strongly recommend these pianos, because I know them to be good and believe them to be the best obtainable for the price."

## How to get a satisfactory piano at a satisfactory price

THIS is a beautiful home scene, but no picture can show the rich finish or the real beauty of the Epworth piano.

And no description can make clear to you the sweetness of the Epworth tone.

But place the Epworth in your home and the distinguished beauty of the design and the rich, mellow sweetness of the tone will not only delight you but will explain the popularity of the Epworth among musicians and music lovers.

It will pay you to read carefully every word of this advertisement, and then to send for our free Epworth piano book which tells how to get a satisfactory piano at a satisfactory price.

Our business was established 1856 by our president, Mr. J. W. Williams, and we want to celebrate this, our fiftieth or jubilee year, by making and selling more Epworth pianos and organs than in any one previous year.

We own and operate two well equipped factories here in Chicago, one for making the artistic Epworth pianos, and the other for making the sweet-voiced Epworth organs.

We invite you to go through our factories so you can see the fine quality of the material we use and how our pianos and organs are made.

We think you understand that we do not sell our musical instruments through piano dealers or agents, but that we sell them all to homes and churches direct from our factory and at the factory price.

This direct-from-factory plan enables you to get a sweet-toned Epworth piano at a saving of about \$100.00, and an Epworth organ at a saving of from \$10.00 to \$50.00.

Now, it is easy for us to make fine pianos, and it is easy to sell them, too, when we know who are wanting to buy, and to whom we ought to send our catalog.

It is still easier for us to sell an Epworth piano after we get a nice one in some home where we can refer to it as a sample of our work.

The Epworth is so beautiful in design and so sweet in tone that it sells itself—all it needs is an introduction to the prospective buyer.

There are people in every community who are thinking of buying pianos, but who, for both security and economy, prefer not to deal with middle-men, agents, dealers or supply houses.

These people would be glad to see an Epworth in the home of some neighbor and to learn from him about the satisfaction and the saving of dealing direct with us, the makers.

Now, here is where you can help us and we can help you.

We can help you by giving you a special reduction on a fine Sample Epworth Piano for your home and to which we can refer prospective buyers.

You can help us by showing your beautiful Epworth piano to your friends and neighbors, and by sending us the names of those who would like to receive our catalogs.

Now, if you would like to know what we are willing to do for you on a fine Epworth piano as a sample of our work, fill out the coupon at bottom of this page and send it to us at once.

We will then send our beautiful piano book and our Special Sample Piano Offer.

If you like our generous offer then you may select one of our fine pianos and have it sent on trial.

When the piano arrives you can give it a thorough trial to see if we have made a happy selection and have sent you the very piano you yourself would have chosen. And if you wish, you may have your friends "take a hand" in helping you to decide the question.

Then, if after a good trial you find the beautiful sample piano to be a nicer, sweeter toned piano than you can possibly get anywhere else for one half more, you may buy the piano on your own terms.

You may pay monthly, quarterly, annually, part cash or all cash, or on any other reasonable terms. We like to accommodate our customers, and especially those who help us introduce our pianos. After you become the owner of an Epworth piano, we will pay you generously for sending names of piano buyers.

Now, if you would like a free copy of our beautiful piano book, with factory prices and our Special Sample Piano Offer, fill out the coupon and send it to us at once. Do not wait, but send the coupon in next mail or as soon as you can.

**Williams Organ and Piano Company**

57 Washington Street, Chicago, Illinois

[Cut this out and mail as directed today]

**Williams Organ and Piano Co., 57 Washington St., Chicago.**

Please send me the free Epworth Piano book with factory prices, also full particulars of your **Special Sample Piano Offer** as advertised in \_\_\_\_\_

Write name of paper on this line

My name \_\_\_\_\_

Postoffice \_\_\_\_\_

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Best of everything the bee-keeper needs. Large and complete stock. Fine Italian and Caucasian Queens. Prompt service. Catalog free.

Get our prices before you order elsewhere.

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## The Lion Engine

is sold direct from  
**FACTORY to USER**

Acting on the theory that "testing is proving" we will send any responsible person, on certain very easy conditions, one of our three h. p. gas or gasoline engines on 10 days test trial. This engine is no experiment, but has been proved by actual use to do any work (where the rated amount of power is required) in the most practical, reliable, safe and economical way.

This engine is of the four cycle type. While the engine is up to normal speed the exhaust valve is held open, allowing free circulation of fresh air in the cylinder. The igniter and intake valve are at rest, therefore are not using gasoline or the batteries.

Our igniter and mixer are of the most simple and reliable character. The gasoline is always properly vaporized and the igniter point never comes together unless a spark is required.

The fly ball type of governor is used, which automatically controls the exhaust, igniter and the gasoline; it also allows the speed to be changed from 100 to 600 revolutions per minute while the engine is in motion—a very superior feature.

## LION GAS OR GASOLINE ENGINES are simple in construction and EASY TO OPERATE

They are used for all purposes where power is required for operating private electric-lighting plants, small factories, printing offices, farm machinery, such as cream separators, feed-grinders, corn shellers, wood-sawing machines, etc., and for a thousand and one other purposes.

### WRITE US A LETTER LIKE THIS:

LYONS ENGINE CO.,  
LYONS, Mich.

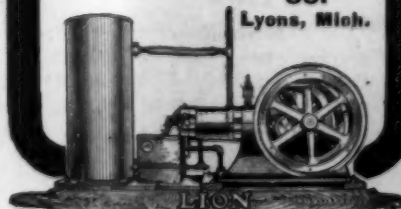
Gentlemen: I am about to purchase a gas or gasoline engine for \_\_\_\_\_ purposes and wish you to send me full particulars about your approval offer as advertised in American Bee Journal. Yours very truly,

Name \_\_\_\_\_  
Town \_\_\_\_\_  
State \_\_\_\_\_  
Street No. or P. O. Box \_\_\_\_\_  
R. F. D. \_\_\_\_\_

When writing, please state definitely for what purpose you wish to use this engine and whether gas or gasoline is to be used for fuel. This information is very important to us. Please remember we send the engine, not the engine agent.

**LYONS ENGINE CO.**

Lyons, Mich.



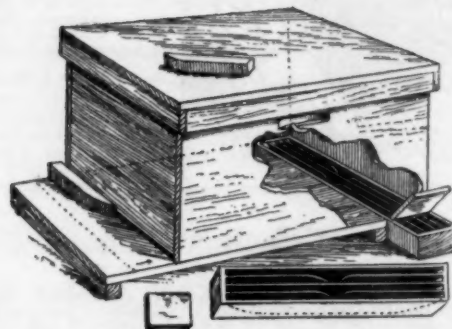
# PREPARE FOR WINTER



### DOVETAILED CHAFF-HIVES

This is one of the very best hives we sell, and for wintering bees, or for the production of comb honey, we do not know of anything better. It is double-walled, made of  $\frac{3}{8}$ -inch lumber having lock corners. It is a trifle heavier than the regular one—thickness  $\frac{3}{8}$ -inch hives, and will take the same hive-furniture, supers, brood-frames, covers, and all; and, besides, it has the advantage that it can be left on the summer stands the year round; and winter losses, if directions are followed, will be almost insignificant.

A good many suppose that double-walled hives are used only in winter; but in localities subject to cool nights and a very hot, burning sun during the middle of the day, they are none too warm for comb honey. Some of the best bee-keepers of the country are beginning to learn that such a hive, having well-protected supers, produce not only more but a better-filled comb honey. Complete prices on our catalog. Ask for it.



### ALEXANDER FEEDER

We are prepared to furnish the Alexander feeder. We make them 19 inches long, so they may be used with either an 8 or 10 frame hive. With a 10-frame hive they will project 3 inches beyond the hive for feeding, and the block may be laid crosswise of the feeder, or be cut off as preferred. With the 8-frame hive the feeder projects 5 inches, and the block lies lengthwise. We soak the feeders in oil to preserve them and fill the pores to prevent the feed from soaking in. Price, finished, including block, 25 cents each. Ten for \$2; 50 for \$9.

### DOOLITTLE DIVISION-BOARD FEEDER

This is one of the most popular feeders we sell. Having the same outside dimensions as an ordinary division-board or brood-frame, it can be used in the brood-nest in the same way. Its construction will be apparent from the illustration. To feed, all that is necessary is to shove the cover or quilt back just far enough so that the opening in the top-bar is exposed. Through this pour the feed from an ordinary coffee-pot or teapot; close the hive up, and the bees are thus supplied without exposing the cluster, and without the use of smoke to drive the bees down. Price, nailed, 30 cents each; 10, \$2.50. In flat, each, 20 cents; 10 for \$1.80. Other styles other prices. Ask for catalog.

The Discount for September is 7 percent.

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Bell Branch..... M. H. Hunt & Son  
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Carlsbad..... Edward Scoggin  
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Toledo..... Griggs Bros., 52 Monroe St.  
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Cincinnati..... C. H. W. Weber  
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**Oregon**  
Portland..... Portland Seed Co.  
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Da Bois..... Prothero & Arnold  
Philadelphia..... The A. I. Root Co.  
10 Vine Street  
Williamsport..... E. E. Pressler  
633 Lycoming Street  
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Dallas..... Texas Seed and Floral Co.  
San Antonio..... Udo Toerperwein  
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Ogden..... The Superior Honey Co.  
**Virginia**  
Spottswood..... W. E. Tribbett

\* These dealers buy our goods in carload lots but supplement them with local-made goods.

THE A. I. ROOT CO., Medina, Ohio





(Entered at the Post-Office at Chicago as Second-Class Mail-Matter.)

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GEORGE W. YORK, Editor

CHICAGO, ILL., SEPTEMBER 6, 1906

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### Introduce Fresh Blood Now

A question often asked by the beginner runs something like this:

"I want to buy an Italian queen to Italianize my bees; when is the best time?"

That question can not be answered by giving a certain date as the best time. If the question be asked in December, the answer may be, "As soon as the bees are at work on fruit-bloom." If asked in the summer, "Any time while bees are still at work in the fields." And circumstances may be such as to modify either answer.

To the bee-keeper who desires to buy a queen from which to rear other queens to Italianize his apiary, or to improve his stock, it is safe to say: "You can wait till next spring, and that will be very much better than to wait till next fall; but it will be very much better to buy this summer or fall than to wait till next spring." This for more than one reason.

The introduction of a queen in spring is likely to interfere more or less with the work of a colony at a time when such interruption will tell on the work of the entire season. At or near the close of the harvest such interruption amounts to nothing.

Queens reared very early in the season are not so reliable as to quality as those reared during the honey-flow and the heat of summer. Of course, this has no bearing in the case of a queen reared in the summer of the preceding year; but such a queen will cost more, being a specially tested queen.

Not only is a queen reared well on in the season likely to be better, but prices are lower then.

If a queen is introduced now she will be in a fully settled colony next spring, ready to

have queens reared from her just as early as it is advisable to rear queens.

For these reasons it is well for any one who desires to have a new queen next spring, to purchase that queen before the present season closes—perhaps the sooner the better.

### Bee and Honey Exhibits

Perhaps there is nothing better as a developer of the home honey market than to make exhibits of bees and honey at local fairs, or even on the streets of any town or city. We once saw a bee-keeper with an observation hive with bees on a vacant lot in a certain city. He was located near a busy street-car line where the passengers had to change cars. Quite a number of them, of course, were attracted by the exhibit of bees, and as the bee-keeper had a good supply of honey on hand, he made many sales. He also distributed literature telling about the value of honey as a food. Of course, all the literature contained his name and address, as did also the labels on the jars of honey. On that particular occasion he was handling only extracted honey. Perhaps if he had also offered comb honey, his sales would have been still larger than they were.

It is also a good idea to give "sample tastes" of honey to the people. This is easily done by having some extracted honey in a dish, and with a teaspoon dip a little on a circular cracker about  $1\frac{1}{2}$  inches in diameter. By putting about a half teaspoonful of the honey on the cracker it can very easily be handed to the prospective customer, who will very quickly drop it into his mouth and soon be smacking his lips. It usually "tastes like more," and often results in sales, where without the "sample tastes" few sales would be made.

There is scarcely anything else that compares with the observation hive containing bees to attract attention and interest the people. Here in Chicago there are 11 vacation schools that run 6 weeks during the months of July and August. We were invited this year to visit these schools with an observation hive, and talk to the children about bees and their habits. We also spoke on one occasion to the children gathered together at a religious camp-meeting held near Chicago the last week in July. We managed to visit 8 of the vacation schools, and our audiences numbered from 100 to 600 in each school. All the children, as well as the teachers, were apparently greatly interested. After talking 15 or 20 minutes an opportunity was given for questions, which were answered so far as possible.

Sometimes we would begin by asking how many of those present liked honey. In almost every instance practically every person present raised the hand. Of course, we took special pains to counteract the story that there was any manufactured comb honey in the markets. We also dwelt on the value of honey as a food, and while the attendance of the vacation schools is made up mainly of the poorer classes of children, we have no doubt that even they will try to induce their parents to use more honey.

At all exhibitions of bees and honey, whether at fairs or on the streets, there should be some one in attendance who is able to give the people quite a little talk on the subject of bees and honey. It is well also to allow an opportunity to ask questions. It will be surprising how interested nearly everybody is, and what good questions they will ask, and occasionally some very amusing ones.

An observation hive, if carefully handled, will last a lifetime. It can be used every year, and we believe it is a method that should be employed more extensively, whether in the home or city honey markets.

### Attend the National Convention

As most of our readers know, the next convention of the National Bee-Keepers' Association is to be held in San Antonio, Tex., Nov. 8, 9 and 10, 1906. All bee-keepers who can do so will undoubtedly make a great effort to be

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present, not only for the sake of attending the convention, but for their general good.

We recently found the following paragraph in the *Orange Judd Farmer*, which, although not on bee-keeping, still is pretty good advice for bee-keepers, as well as everybody else:

Traveling is a great educator. Of course it costs money, but every person should aim to travel some, even though it should not be much. The aim should be to travel in the line of one's needs; that is, to travel so that it will benefit the individual in the line of his work. The farmer, as a rule, does not travel much. Because he does not, he is apt to overestimate the importance of things that are near. He is also apt to overestimate the importance of his own system of doing things. About the only remedy for this circumscribed vision is to do a little traveling. Even going to a neighboring county may let in much light. Going to a neighboring State may let in more. The more light that thus comes in, the wider is the horizon of vision. Each added piece of information helps to make a broader man. Those who can, therefore, should travel a little. Money judiciously spent in that way is not lost.

There is no doubt that getting away from home and seeing the country, besides meeting other people, are good things for any one. Time and again, bee-keepers have told us that they felt well repaid for attending conventions, no matter how far they had to go from home. It certainly gives one a broader outlook to be acquainted with more of the world than lies simply around home. A bee-keeper is no exception to this rule. There are many good things said at conventions that never would appear in print. There are also many conversations between sessions of the convention that are invaluable. There are acquaintances formed and experiences exchanged that can not be gotten in any way except by attending the conventions.

Unless one gets away from home and sees other parts of our great country, he is likely to feel dissatisfied, and thinks he would prefer to live somewhere else than just where he is located. We think we are safe in saying that after seeing the country through certain parts of New Mexico and Arizona, on the way to the Los Angeles Convention, there was more than one bee-keeper in the region of Lake Michigan who was better satisfied than ever with his own home and surroundings. It is also a nice thing to see other parts of the world, so far as possible, as it extends one's vision, and gives him new ideas.

Personally, we have never been further south than St. Louis, and are looking forward with much pleasure to the trip to San Antonio. We have heard great things from that section of the country, and have long desired to see what it looks like, and also to meet as many as possible of the practical bee-keepers in that region. The South ought to be about the best country for bees in the United States. They have the longest blossoming season, and no wintering question. Very likely during the next few years there will be greater strides made in bee-keeping in the South than in any other part of the country. The business is pretty well developed in the North, and as more Northern bee-keepers push into the South, and as the people already there become more interested in bee-keeping, the industry will receive a great impetus.

The meeting of the National Bee-Keepers'

Association in San Antonio will undoubtedly be a great event for the bee-keepers in that part of the United States. It should be used to create a new interest in bee-keeping there, as it is the first time the National Convention will have met in the far South. We hear of thorough preparations being made by Texas bee-keepers to take care of the convention. They certainly will do their part toward entertaining, and seeing that it is a great meeting. It is none too early to prepare for attending it. The weeks slip away so rapidly that the time to start will be here very soon. It is hoped to assemble enough bee-keepers in Chicago to take a special car to San Antonio. The round-trip rate will be \$25 from here. The cost of a berth in the tourist sleeper costs less than \$5 one way, and it will take two nights to make the trip. Those who were fortunate enough to be in the car going to Los Angeles from Chicago, in 1903, will certainly want to go in the special car to San Antonio. It is much more enjoyable to go on such a trip with others interested in the same business.

We will be pleased to announce in the *American Bee Journal* the names of all who will go in the special car, starting from Chicago Nov. 6. The exact hour of leaving will be announced later. We will be pleased to reserve berths for all who will let us know in time. It will go over the Frisco System.

### Pollination of Cucumbers

Farmers' Bulletin No. 254, issued by the United States Department of Agriculture, is devoted to cucumbers. It tells all about how to grow them both outdoors and indoors; also as to preparing them for market. Under the directions for forcing-house cucumbers it gives the following paragraph, which mentions the aid of bees in pollinating blossoms:

"Under greenhouse conditions and at the time of year that the cucumber is forced it is necessary to provide for pollination. In small establishments this work can be done by hand. The staminate blossoms are removed, the petals turned back so as to allow the anthers to project, and the pencil thus produced is then thrust into a cup of the pistillate flower. In large establishments where hand-pollination is out of the question, a colony of honey-bees is placed in each house to accomplish the work."

It is commonly known that growers of early cucumbers in greenhouses purchase colonies of bees in the spring for use in pollinating the cucumber blossoms. There are many such cucumber-growers around Chicago, and some bee-keepers sell quite a number of colonies of bees to them every spring. Evidently the work done by the bees is far ahead of anything attempted by hand-pollination.

### Pure 3-Banded Italians Ahead

Recently Wm. M. Whitney, of Lake Geneva, Wis., called on us, and in speaking about the work of various strains of bees this season, he remarked that pure Italians had produced better results in surplus honey than his mongrels. Since he returned to his home he has investigated closely, and wrote us as follows under date of Aug. 23:

You remember that when there I said something about the work of my bees in the pro-

duction of surplus honey. The facts are, that all the surplus I have gotten has come from my thoroughbred 3-banded Italians, and not a section from the mongrels, which have had the same treatment so far as it was possible for me to give; with colonies so strong that 60 percent of them swarmed while being nicely shaded, but only 9 percent of the Italians swarmed, and all standing in the sun. In fact, I tried to induce some of the latter to swarm, as I wanted to get queens from them, but had to force the building of queen-cells by division. Now, this has been my experience time and again. I do not want anything better than the 3-banded Italians properly bred. I do not believe there is anything better.

WM. M. WHITNEY.

### Queen-Cage Candy—Important.

The following paragraphs are taken from *Gleanings in Bee-Culture* for Aug. 15:

In selecting an extracted honey to use for making a queen-cage candy, it is very important that the source of that honey be known. If unknown it should be thoroughly boiled to disinfect it from any possible germs of black or foul brood. One boiling may not be sufficient. Boil it one hour and let it stand two or three days, and then boil again another hour. This is better than boiling three hours all at one time.

One can readily see, if he will reflect a moment, how foul brood might be spread through the agency of bee-candy. Most of the mailing-cages now are self-introducing by the bees eating out the candy and finally releasing the queen. Suppose this candy is contaminated with germs of black or foul brood. The chances are that the colony to which this queen was introduced would soon show symptoms of disease, even though the colony or bee-yard whence this queen came might be perfectly healthy.

This matter is so important that I would respectfully suggest that our apicultural exchanges bring the matter before their readers. In the meantime the purchaser of the queens, if he wishes to be on the safe side, taking no risk, may recage the queen received in the mails, introducing her by means of bee-candy made of honey out of his own yard.

We are glad to help pass along the above caution. As it is the season when many are requeening extensively, the advice is very opportune. Too much care can not be exercised in the matter.

### Do Bees Puncture Grapes?

The article by Mr. John Kennedy, page 757, bears internal evidence of the desire to be entirely fair, even to the acknowledging of one's self in the wrong. It reminds of the story of the man standing on the ground looking at a mud-and-stick chimney being built. The man on top called to the man on the ground, "Is it plumb?" Promptly came the answer, "Yes, it's plumb, and a little more." Mr. Kennedy is fair, "and a little more."

Here is the case before us: The grapes were punctured; the birds were driven away, and thus not guilty; bees were there in plenty, and so guilty.

Suppose Jones on trial for theft: A coat hung on a nail in the evening is missing in the morning. An alibi is proven for Smith and Brown, hence their innocence; but Robinson swears he saw Jones in the room where the coat was in the evening. Would any jury convict Jones of theft? No; they would say: "Yes, you saw Jones in the room; but did you see him take the coat?" Mr. Kennedy, did you see the bees pierce the grapes?

To be sure, if there were positive evidence



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that excluded all other agencies, then judgment might be passed upon the bees. But there is no such evidence. There is the possibility of night attack, as given on page 653.

Also, the "early bird" may have gotten in its work while Mr. Kennedy was still in bed.

If bees are the culprits, it ought not to be a difficult thing to have positive evidence. When they are upon the grapes by the thousand, present to them a sound cluster, or un-

cover a cluster that has been covered with a paper sack. Then watch and see them pierce the grapes—if they are guilty. Or, if that be too difficult, watch awhile to see that nothing but grapes can be in the case; then brush off the bees and see whether the grapes are punctured. Bees have been tried more than once in this way, and their innocence established. A trial by Mr. Kennedy is likely to establish it more firmly.



**National Nomination Notice.**—We have received the following from General Manager N. E. France, of the National Bee-Keepers' Association:

Each member of the National Bee-Keepers' Association is hereby requested to mail to the office of the General Manager, on or before Sept. 29, 1906, nominations of candidates for offices now filled by the following:

C. P. Dadant, President; Geo. E. Hilton, Vice-President; W. Z. Hutchinson, Secretary; N. E. France, General Manager; and Directors: Jas. A. Stone, G. M. Doolittle and R. A. Holekamp. N. E. FRANCE, General Manager. Platteville, Wis.

Every member of the National should accept the foregoing invitation to make nominations for the offices named. If not satisfied with the present officers and their management of the Association's affairs, here is your chance to nominate and elect those that you think would do better. Of course, each member has the last Annual Report with the names of all the members at the time it was published, and from that list selections can be made.

**Prof. A. J. Cook**, of Claremont, Calif., who has been spending a year in Germany, called to see us on Aug. 25, when passing through Chicago on his return trip. Mrs. Cook and daughter are still in Germany, and expect to remain a year or so longer. Prof. Cook is looking and feeling very well indeed. Even though he is just 64 years old, he hasn't a grey hair, and seems as young as a man at 40. His naturally buoyant disposition combined with Southern California climate seem to have kept him young in looks and actions. No doubt, also, his trip across the "briny deep" helped him physically, and his stay and study in Berlin brightened him up intellectually. Prof. Cook is a delightful conversationalist, and has abounding faith in everybody and every good thing.

**The Jenkins' Apiary**, shown on the first page, is located in St. Paris, Ohio. Mr. Jenkins writes as follows:

In June, 1902, I walked out in my orchard and saw a large swarm of bees hanging on a limb. I let them hang until nearly sundown,

and none came to claim them, there being no bees close to me. Having no experience with bees I did not know what to do but to secure a box and try to get them into it. Being in the merchandise business, I went to the store and secured a nice box, and cut the limb off and laid it and the bees down in front of the box. They then and there took possession and went to work. Thereafter my leisure hours were spent in watching them work.

The next spring I transferred them to a hive made by myself. They gave me two nice swarms the same year. I wintered them on the same stands, but with a shed over them. I now have 20 colonies. I never take from them but one super containing 24 sections of honey, and let them have the balance to winter on.

I sell all my honey without any trouble at home for 15 cents a section. I get my instructions from several bee-books and bee-papers. S. N. JENKINS.

**Gen. James F. Smith**, the new Governor General-elect of the Philippines, who takes his position Sept. 15, is a friend of one of the prominent bee-keepers of California, having been brought up on a farm in Sonoma Co., Calif. It is just a possibility that the much-talked-of bees of the Orient—*Apis dorsata*—may be landed on the Pacific Coast first, if Mr. Benton, who is now in the Far East, does not soon succeed in landing them in Washington, D. C.



Conducted by EMMA M. WILSON, Marengo, Ill.

### Sweet Clover Seed

DEAR MISS WILSON:—As a sister bee keeper, and in search of sweet clover seed, I thought I would write

### QUIT KICKING

Quit kicking just because you think  
The old world's going wrong;  
There's always something somewhere  
Of happiness and song.  
Besides, you never made the world;  
Life's scheme is not your own;  
Quit kicking; take what happens, and  
Just reap what you have sown.

Quit kicking. When the pay is bad  
Remember what you've lost  
Some other fellow's gained; and so  
In summing up the cost  
We find that in the end we know  
What other men have known—  
Results? We take them as they come—  
We reap what we have sown.

—Successful Farming.

**Bee-Keeper vs. Saloon-Keeper.**—One of the best paragraphs we have ever read on the anti-saloon question is this from the Modern Farmer and Busy Bee:

"If the saloon-keeper is engaged in a legitimate business and wants to deal fairly and honorably with his fellow-men, why is it that he defies public sentiment and disregards the wholesome and reasonable laws of the land? Why is it that he is the enemy of every officer, from the president down to a constable, who tries to enforce the laws which have been enacted by the people to regulate the liquor-traffic? The simple truth of the matter is that he is engaged in a business that depends upon the depravity and vices of humanity for its perpetuity. The saloon is not a necessity to anybody, and no one becomes a patron of it until he has developed an abnormal appetite, for no one is born with a thirst for such things. If a saloon is a business proposition, like other business propositions, why not close it at 6 o'clock on Saturday and let it remain closed until Monday morning?"

But one may say after reading the above, "I don't see what that has to do with bee-keepers." Well, it has at least this much: The laboring class of this country are the people who support most of the saloons, and they are the class that buy most of the honey—or at least would do so if they didn't spend any money for liquor, which is thus worse than wasted.

It would be to the honey-producer's interest to have the saloons closed not only from Saturday 6 p.m. till Monday morning, but all the rest of the time during the week. The open saloon is a curse—yes, a crime, and a criminal-producer. Bee-keepers and all other honest and moral persons ought to help close it tight, and forever.

you, as I saw the picture of Dr. Miller standing amid the sweet clover in the American Bee Journal of July 26. Do you have the seed to sell, or know any one that does? I have been watching

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for advertisements for a year, but have failed to see it advertised. I think sweet clover would be a great help to us, as our bees are always idle after white clover is gone, for quite awhile. We had a very good honey season through the white clover harvest, but I am afraid the drouth of July will hurt the sumac yield, which is now in bloom. It is next to white clover for fine honey in this locality. We have 9 colonies of bees, and I have done all the work with them myself.

I always enjoy reading the American Bee Journal, especially the Sisters' department. MRS. OTTO HOTZE.  
Monroe Co., Ind.

We have no seed for sale. Turn to page 627 and you will find an advertisement of yellow sweet clover seed for sale by one of the sisters—Mrs. A. L. Amos. Whether she has white sweet clover seed or not I do not know. Advertisements of the kind seem more scarce than usual this year, and the seed is said to be more scarce.

The yellow sweet clover blooms from 2 to 4 weeks earlier than the white. The white sweet clover is generally of more value where white clover abounds, as it comes in at the close of the white clover harvest; but in some places where there is no white clover to speak of, as in the locality of Mrs. Amos, the yellow is of more importance. We have been in the habit of thinking that we didn't care anything for the yellow kind, but this year, when the common white clover was a dead failure, it would have been a big thing for us if we had had the yellow sweet clover.—[If any one has sweet clover seed to sell, it would seem a good thing to offer it in the advertising columns.—EDITOR]

## Uniting Colonies—Sowing Sweet Clover—Queen-Traps

1. I have a few colonies of bees which I do not wish to keep over winter. The comb is old, black, and almost or quite immovable from long neglect; and yet it seems a pity to destroy the bees. Can I unite them with other colonies? If it can be done, please give directions very plainly so that an amateur will have no trouble in understanding.

2. I wish to sow a small patch of sweet clover. Should it be sown in the spring or fall? If the former, will it blossom the same season?

3. Is the "A B C of Bee Culture" suitable for a beginner? I have 3 or 4 years' experience, and the little I have learned looks small in comparison with all that I need to learn.

4. Do you approve of queen-traps in swarming-time? Do they hinder the free coming and going of the workers? ERIC CO., N. Y. A SISTER.

1. Let A be the hive with immovable frames out of which you wish to get the bees, and B the hive into which you wish to put the bees. After blowing a little smoke into the entrance, turn A upside down and place over it any empty box of suitable size with mouth downward. With two rather heavy sticks pound upon the sides of the hive, and keep pounding at inter-

vals until all, or nearly all, the bees are in the upper box. (If the box does not fit well over the hive, and the bees seem inclined to fly at you when you begin drumming, treat them to a little smoke.)

After blowing a few puffs of smoke into B, lift the box of bees from A, gently dump them in front of B, and let them run in. If there is any fighting after they have entered, smoke them until they behave. Now put a queen-excluder over B, and set A over this. The bees will go up to take care of the brood, but not the queen; so no eggs will be laid above, and in 3 weeks all brood will be hatched out, when you can dispose of the upper hive as you like. If you wait until brood-rearing has about ceased—say the last of September or in October—there will be

little or no brood to dispose of, but there is more danger of fighting then.

But are you sure it may not be better to keep them over winter? Then wait until they swarm, and 3 weeks after they have swarmed, when there will be practically no brood in the hive, drive out the rest of the bees.

2. You can sow it either this fall or the spring of 1907, but in neither case will it blossom before the summer of 1908.

3. Yes, it is entirely suitable for a beginner, and also for the most advanced.

4. The hindrance to the passage of the bees is not so very serious; not so much so perhaps as the hindrance to ventilation. But when one can not be present when a swarm issues, the trap will secure the queen.



Conducted by MORLEY PETTIT, Villa Nova, Ont.

## Hive Ventilation

F. G. Herman, in the Michigan Farmer, says this about ventilation.

The hive-entrances must be sufficient—the whole width of the hive and at least one inch high. If the entrance-guards are used, then 2 inches high, and the whole width of the hive. Openings in the upper part of the hives are not only useless but are actual nuisances. It is this way: An opening above will create a circulation of air on account of the difference of temperature between the inside and the outside of the hive. Now if the weather is cool the circulation will be strong precisely when not needed, or even hurtful. If the weather is very warm, the temperature is about the same outside and inside, and there will be almost no circulation, and the top openings will then be nearly useless, besides affording robbers a splendid chance to raise a racket. For this reason I prefer to have an ample entrance only; that means also a hive not too high, and wide enough.

The large entrance is quite correct, but his theory about top ventilation is pretty, but it does not work out. A hive does not ventilate like a chimney. The air is controlled by—not electric fans, but "bee-fans," which, placed at the entrance, draw the air out, and if there is an opening at the top of the hive a strong colony will draw a current of air in at that opening and out the entrance. Of course, the opening should be closed in cold weather, also when robber-bees are about, because in the robbing season there is no swarming season.

The amusing part of Mr. Herman's article is his concluding advice with reference to making a newly-hived swarm comfortable. After advising plenty of room, shade, large entrance, and cooling the hive and surrounding ground with water—all splendid ad-

vice which has been tested and tried for years—he says:

"If the weather is very hot, let the cover be partly off, leaving a good, big crack for the air to pass through."

That is splendid advice, too, but how does it compare with what he says above?

"If the weather is very warm.....the top openings will then be nearly useless."

Of course, Mr. Herman does not believe what he said at first, or he would not belie it in his practise with newly-hived swarms. And if top ventilation is good to cure the swarming fever, why not apply it as a prevention rather than cure?

## Chilling the Honey-Flow

It is a bit amusing in reading post-card crop reports to see something like the following:

"No honey, too wet; rained nearly every day;" and the next card from another section: "No honey, too dry; had no rain worth mentioning all summer." For my part, one of the best averages I have had per colony was taken the wettest summer I ever kept bees. On the other hand, I have had a good average flow in a dry year.

One thing I have noticed, and Mr. S. T. Pettit called may attention to it particularly, is that a sudden drop in temperature from 80 and over to below 50 will chill the blossoms so as to stop effectually a good flow of honey. This point, while it is a matter we can not control, is well worth knowing and considering. It seems to apply equally to clover, basswood and buckwheat.



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The "Old Reliable" as seen through New and Unreliable Glasses,  
By E. E. HASTY, Sta. B. Rural, Toledo, Ohio.

## COMB FOUNDATION CALLED "ARTIFICIAL HONEY-COMB."

When foundation is sent by rail the handlers of freight would get not the faintest idea of what was in the packages if marked, "Comb Foundation." It gets marked, "Artificial Honey-Comb," that folks may have some idea of what it is—albeit the idea so conveyed is a very incorrect one. Quite likely the public belief that artificial comb can be made is helped on by these transit markings. Page 554.

## YOUNG LARVÆ ON OUTSIDE OF BROOD-NEST REPRESS SWARMING.

W. T. Brite's idea that young larvæ on the *outside* of the brood-nest are more repressive of the swarming impulse than when in the center may have something in it. More nurses have a chance to take a hand. Page 557.

## IS MATRIMONY WORSE THAN LIGHTNING?

Might have been worse, Sister Wilson. It wasn't matrimony that struck the shop—only lightning. Page 557.

## CUTTING SECTION COMB FOUNDATION.

I never yet cut foundation in a way that seemed to me to be quite satisfactory. I usually use old shears chilled in cold water; but that is shamefully expensive of time. Let us hope that the Stoffet method, given on page 563, may at least afford an alternative way which some will find to their notion: Long hot knife used very swiftly on 6 sheets at once; an arrangement resembling the carpenter's miter-box, enabling the swift play to be correct. Wonder if a fine wire, tight in a wooden bow, and kept hot with an electric current, would not be much better than a knife. To have so little wax melted that there won't be enough to reach out and stick to the next sheet is the object, I take it.

## TRANSFERRING EGGS IN QUEEN-REARING.

E. W. Diefendorf makes an astonishing statement on page 563. Finds it easier to put eggs into queen-cups than larvæ, on account of failing eyesight. And they succeed all right if the cups are bee-polished before the operation. Only one page further back Dr. Miller expresses a prevalent opinion, and says he is not aware that any one has ever succeeded at this. If (1) just the undamaged egg and nothing more was (2) put into just the right small quantity of (3) fresh, thin food, at (4) just the

right hour in the age of the egg, and (5) no uninterested bee-gluttons were around to eat the food and tumble the eggs out, then it would seem the process ought to succeed. But securing all 5 of these things is a pretty tough problem. And maybe there are more digits still in the bush.

## "DECENT JOBS," AND OTHERS.

And so they call this truth, eh? to be put at masthead:

"One decent job's an earnest that you'll do a thousand more."

Well, even a Standard Oil lawyer can not gainsay that truthful elucidation of "making good." But the artist who drew big *4-legged* bees just below that truthful line, he didn't do the decent job. And, eke, he might have looked at white clover heads before he proceeded to put a leafy involucre around them. Page 569.

## PRESIDENT DADANT AND RHEUMATISM.

The bald-headed druggist was off his base when he told the lady his remedy would infallibly cure baldness; and the President of we'uns the bee-bugs shouldn't indulge in rheumatism unless he is prepared to admit that bee-stings do not always cure rheumatism. Page 574.

## SHALLOW EXTRACTING FRAMES—CLEANING EXTRACTING COMBS.

Yes, Comrade Dadant, a frame only 6 inches deep is much easier to uncap than a large square frame. That's one point in favor of the shallow frame, sure. But when the bees try to coax the queen up through the zinc, as they often do, the empty nest they polish out is likely to occupy too nearly all the frame, seems to me.

The objections named against keeping the extracting combs over to next spring with the honey on them are real and great objections—except that I think it rather an alarmist idea about the old honey thus given damaging the new crop. Might, if not put on until a flow of 6 pounds or more a day was already in progress. I *meant* to let the bees into my comb-house and clean up my extracting combs last fall (a way of doing O. K. if you proceed wisely), but days when I wanted to entertain the circus were not plenty. Soon days warm enough for that purpose got scarce, as I extract very late. The upshot was it didn't get done at all. Well, this spring the time to put on supers was mostly regular starvation time, and I was proper glad to have so convenient a way to feed each

colony when a little feed was a decided help to them. Page 575.

## ALMOST A CAT-ASTROPHE ON FERRIS ALLEY.

'Tis night.

On the Hastily-constructed but lofty fence of Ferris Alley three cats gently tune it. Possibly not an idyllic situation, but a situation just as Nature will have it.

Ah! Ah-h!! What's this? A fourth cat appears—mill-dust in his fur and grit in his eye.

A curse—a murrain—a bootjack on fourth cats, don't you know? Three cats are company, but four are nothing.

I plead guilty of taking Mr. Alley's figures without changing them. Probably was conscious that they were capable of being squeezed a little, but under the impression that it was so little as not to be very material. Now I know what impression did—when sharply impressed on my fur by the fourth cat. Much surprised to see the 5304 eggs per day squeezed down to 4645. Yes (as the windows all 'round the court are opening), I'll come down. Not sure that the lodgers hereabout are willing for us to be on "speaking terms," but we'll try it anyhow.

Now as to the two bootjacks the Boss holds up; What is a frame of brood? and, How many eggs a day will a queen lay for 21 consecutive days? My usage in my records has been for many years to call a frame of brood 20 squares. And a square is a spot holding a quarter thousand. This would allow 5000 head of brood to the frame—1968 of Dr. Miller's 6968 going blank. Very likely the average is not so high as 5000; but that number is *convenient*—and, moreover, it's not quite so much as his proposed  $\frac{3}{4}$ , which is 5226. My "square" is a little over 3 inches each way, only one side counted. I find it very convenient when taking the census of colonies in spring, for which purpose the "frame" is not usable.

I don't know so much as I wish I did about the consecutive laying of queens; yet I will start out. Casting extreme cases aside, I would suggest as a practical maximum, enough to produce a 7-pound swarm of bees in the 21 days. At 4450 to the pound that would be 4450x7 and divided by 21. This is 31,150 for the total, and 1483 per day. For one, I am disinclined to believe that a queen lays even so much as 2000 per day for so long a term as 3 weeks. Page 653.

## EXTRACTED AND COMB HONEY ON SAME HIVE.

Some of us look with decided suspicion on producing both section honey and extracted honey from the same hive. Especially if your locality is a poor one you will need all your address to get good sections finished in paying quantities anyhow. Think twice, aye three times, ere you do any "monkeying" with empty extracting combs near your sections in such a location. Ruin your already too slender chances. With a first-rate location and half-depth frames, quite likely the way outlined by James A. Green might work very well. Lift the extracting super just at the right time and put a super of sections under it. Also, Mr. Green

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advises well when he advises you to pass judgment on your laggard colonies in late spring. If you judge they are not likely to finish up enough sections to amount to much, then give them a chance to store some honey in extracting frames. Page 579.

### SHORT LIFE OF SOME QUEENS.

F. L. Day comes back with explanations of the very short life of his queens which are evidently very much better than mine were. The locality conduces to excessive swarming, it seems. Perfectly true that some localities do that. And I guess we may lay it down as a sort of general rule that when the bees want to swarm and the queen will not lend herself to that idea they show displeasure by worrying her, and are liable to worry her to death.

They are especially liable to do this if they swarm and find she is not with them, and have to go back on that account. We also know that *sometimes* bees are not satisfied with one series of swarms in a season, but go through the round of prime swarming and afterswarming again. Page 596.

### RELEASING QUEEN THROUGH COMB-HONEY PLUG.

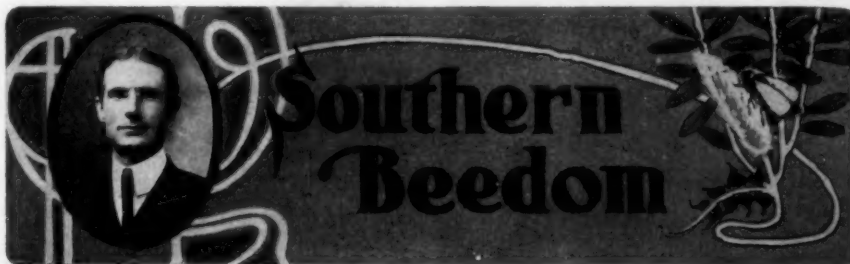
Comrade Scholl gives an experience which is rather new in print, but perfectly natural and liable to happen every now and then. If you expect bees to release a queen by gnawing through a cut-out plug of comb honey they may take out the honey and *repair the comb*, and repair it in such a way that the queen is kept in indefinitely. Better we "look a little out." Page 596.

balled or refusing to lay. The trouble with them is that the bees, after cutting down the deep cells for the queen to lay, will proceed to build an extra comb between. A tack pressed in under each section holds the sections  $\frac{1}{4}$  inch off the bottom.

Queens' eggs can be moved without breaking, Stachelhausen and others to the contrary notwithstanding. I sometimes use them in grafting queen-cells, and get as good results as with larvae, but as an egg may be 3 days old, or an hour old, it is not best to use them in grafting, on account of the different ages.

### BREAKING UP LAYING WORKERS.

A good and easy way to break up laying workers is to get an old queen and cage her without feed for a few minutes, and then lift out a comb with the laying workers and let the queen crawl out and on the comb; no smoke to be used. Set the comb back, and the job is done. Young queens can be introduced to queenless colonies the same way, but not to laying-worker colonies. Sabinal, Tex. GRANT ANDERSON.



Conducted by LOUIS H. SCHOLL, New Braunsfels, Tex.

### A Neat Georgia Apiary

Mr. J. J. Wilder, of Cordele, Ga., has very kindly sent me a photograph of one of the pretty apiaries of that State, with the following regarding it:

This is only a portion of the apiary of Mr. E. H. Norton, of Berrien Co., Ga. He runs for both comb and extracted honey, and has large crops each season. The neatness of this apiary shows that it receives the best of care. The man in the apiary is Mr. Norton, and the boy is his oldest son.

Mr Norton is one of the coming bee-keepers, loves the business, and a promoter of the industry in this section. J. J. WILDER.

Mr. Wilder also writes that reports have come in from every portion of the Southeast, that the honey crop is the best in years. This is quite contrary to reports of the West and Southwest. Texas, as a whole, will have a very short crop—only a very few scattered localities being favored with even a light crop of surplus honey. Recent rains may improve conditions for late summer and fall, however.

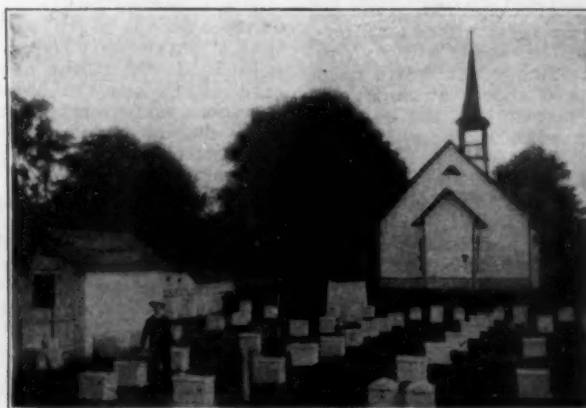
### Queen-Rearing Nuclei—Laying Workers

As I see so much in the bee-papers about nuclei, both large and small, I will tell what I use. Having years of experience along this line, I may be able to save some one the trouble and expense of trying what I have.

The first nucleus hives that I used are still in use, and I would recommend them as the best baby-nucleus hives. The frames for this nucleus hive are of the proper size to hang crosswise in an

8 frame Ideal super, 2 frames to each nucleus. The baby-nucleus hives are very handy to haul about, and I use them mostly for out-apiaries. At the home yard I use what I call "flats." They are regular 8-frame Ideal supers with 3 division-boards that fit bee-tight, thus dividing one super into 4 nucleus boxes, with entrances at each end and each side.

I also divide an 8-frame brood-chamber into 3 parts, with entrances at each



APIARY OF E. H. NORTON.

end and one side. Each division holds 2 Langstroth frames. These I do not haul about, as they are bulky and heavy; but are good to keep queens in all winter. I also use some boxes just big enough to hold two  $4\frac{1}{4} \times 4\frac{1}{4}$  sections, and have no trouble with queens being

be members of these societies, with power to initiate those in their charge in the science of bee-keeping.

"The administration will accord a loan to those employees whose pecuniary position will not permit them to make a start in bees. Likewise it will undertake to plant seeds of honey-bearing flowers along the road."





## Can't Manage Bees by Rules —Value of Bee-Literature

BY G. M. DOOLITTLE

Lately I received a letter from a correspondent, written evidently by one who was not in an easy frame of mind when he wrote, containing, among other things, the following:

"All the writers on bees are as opposite in their opinions and practices as it is possible to be. I have looked in vain for some one person whom I could follow with a certainty of success, and as freely as I would a teacher of any of the common branches of human knowledge. Dr. Miller teaches one thing, you another, Alexander another, Hutchinson still another, and so on, none of you agreeing on anything, except that you all wish to get a living and a little something more out of the bees. Why don't you work alike? This is the way people of other trades do."

As there seems to be an opinion similar to the above prevailing with many bee-keepers, especially with beginners in apiculture, perhaps a few words trying to explain these matters may not be amiss, and it may also help the readers of the American Bee Journal to understand each other better, or, at least, help us to understand why nothing pertaining to bee-lore can be followed like a rule in arithmetic.

Twice two makes four every time, because it can not be otherwise, no matter by whom multiplied, nor at what season of the year the computation is made, or in what locality; hence, we have the rule of multiplication as being always the same throughout all parts of the world. The same of addition, subtraction, etc., but if we come to apply any rule similar to the above to bees, we find it won't work, for the reason that every season brings its changes, and every locality its different sources of bee-supply or forage, heat and cold, while some one less than 100 miles distant has a full supply of nectar when we have none, or the ground is fairly flooded with water while the soil in our neighborhood is so parched that vegetation is withering and dying. And so something that will work successfully with Dr. Miller on July 4 will not work at all here, and something which is eminently successful in my hands on that date will not work at all with him. Now, what shall I do? Tell him that he is a fraud and trying to mislead me in what he writes? By no means. I must use charity, and try to find out wherein the conditions with him are different from what they are with me.

To illustrate: One season in our basswood honey harvest I found I could introduce a queen by letting her run in at the entrance and smoking the

bees 2 or 3 minutes after I let her go, having removed the old queen during the day, and running the new queen in with smoke during the twilight of the evening of the same day. And as I did not lose a single queen out of nearly 100 so put in that season, I set it down as a rule that queens could be thus introduced safely every time. Now, thought I, here is a common-sense rule that will apply to bees like the rule of multiplication applies to the multiplication table; but when I came to use the same rule after the honey harvest was over I found my rule was "no good," as 3 out of every 4 queens put in in that way would be lost. I was foolish enough to write to a friend at the time I was having such grand success how to introduce queens, in reply to such a question from him, and when he tried it in a different locality he lost every one so tried. The result was that he called Doolittle anything but a "teacher of any of the common branches of human knowledge." Now why was it that my friend did not succeed as I did? Simply because all the circumstances as to honey-yield, state of the weather, etc., were not in the same condition in his locality that they were in mine. Again, when there came a change in the conditions in and about my apiary I also failed; and I doubt if those exact conditions ever came to my apiary again.

Then, I have been successfully using, and supposed successfully recommending, the superseding of all old and failing queens immediately after the basswood harvest by the plan of killing the old queen, and at the same time giving a caged ripe queen-cell (one reared during the honey-flow from basswood, when the best of queens are reared) at the time of the removal of the old queen. The cell being caged, keeps the bees from destroying the cell before they miss their old queen, and thus when the royal occupant emerges from the cell from 24 to 36 hours later, she is accepted, no queen-cells reared, and she soon becomes mother to the colony. This, in brief, has been my way of superseding old queens for the past 20 years, and, with the exception of now and then a case the plan has given perfect satisfaction. Now and then the bees would start queen-cells from their own brood, killing the queen after she emerged, when they would perfect a queen from their brood, when she, in time, would become the mother of the colony, giving the colony a young, vigorous queen just the same, only she would not be just the "blood" which I wanted them to have. Imagine my surprise to receive a letter a few days ago telling me how the writer had used the plan for

the first time this year, and only 3 out of some 30 or 40 colonies had accepted the young queens, while the rest had killed these young queens, reared queens from the brood left, and had gone to swarming with the young queens to an excessive rate. Now, I do not remember ever having a swarm when trying this plan at the close of the basswood harvest (though I have had just the conditions he describes when trying it during clover bloom), for we have a scarcity of bloom from basswood to buckwheat, so that no colony thinks of swarming, no matter how many queen-cells are reared and perfected in a hive at that time. But from his "swarming" it is evident that the same conditions exist with him after the basswood flow that do here in June when the clover is in bloom.

Thus we see that no rule in bee-culture can be formed which will do to follow throughout the United States and the world, as can the rules in arithmetic, and the only thing we can do is to try the plans of others cautiously till we know that they are suited to our wants, using charity all the time. There is a great difference in individuals. Some experiment carefully, proving everything critically step by step as they go, arriving almost at a definite conclusion at the first experiment, while others experiment in such a careless, slipshod manner that their experiments at the end of several years are of little value. Notwithstanding all of these drawbacks, any careful readers of what is written on apiculture will find much of value after they have sifted the chaff from the wheat. It is often necessary to apply what was written a long time ago in the "good book," where it says, "Prove all things; hold fast to that which is good," when reading much of the literature of the day on many other subjects besides bee-keeping.

However much there may be of imperfection in our bee-literature, \$100 per year would not hire me to dispense with it, for it is to this same literature, very largely, that I owe nearly all the knowledge I possess, and the success I have obtained, in bee-keeping.

Borodino, N. Y.

## Supers, Fences and Sections

BY ADRIAN GETAZ

I have tried several kinds of supers and sections. All have some advantages and some disadvantages. Some of the late contributions to the American Bee Journal have shown me clearly that in a few cases, at least, the locality has more to do with the selection of the right kind than I had supposed until now.

### SUPERS.

I have used the T-supers to some extent, both with loose and fixed T-tins. I have several yet, and occasionally use some when I am short of the other kinds.

My objections to them are that the top and bottom of sections are left unprotected, and that the tins keep the sections apart and give the bees a chance to push propolis between them

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to a considerable depth, which means that much more to scrape off; and after the scraping is done an ugly stain is left. The cut shows how the tins keep the sections apart:

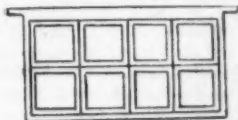


In my locality the sections must be protected all around or the unprotected parts get badly travel-stained, and sometimes quite dark. The flow is seldom heavy here, except occasionally for only a few days at a time. Usually there are interruptions between the different sources of surplus. The result is that the sections are often on the hives several weeks before being full and capped. Add to this the disadvantage of a locality furnishing plenty of propolis, and it is easy to see the necessity of keeping off the propolis from the sections as much as possible. In localities where the honey-flow is heavy the case is altogether different; the sections do not stay long enough on the hives to get badly travel-stained, or daubed all over with propolis. In such cases the T-supers are as good as the best.

As I make my own hives I am not compelled to use the standard sizes, and for convenience I make the supers a fraction over 17 inches long—just the length to accommodate 4 sections.

Before going further, let me tell you the story of the case. Why did the Root people adopt a super too long for 4 sections, and of course entirely too short for 5?

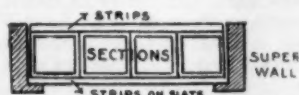
When A. I. Root invented or adopted the present sections the modern supers were not in use yet. The surplus apartment was another hive-body containing frames like those of the main body. A. I. Root adopted a section of such size that 8 of them filled a frame, as shown here in the figure:



When the modern super was invented the size of the hive-body could not be changed because there were already too many in use. Evidently the supers must be of the same length as the hive-body. The size of the sections might have been changed with less inconvenience, but still not without some disadvantages.

Making my own hives I adopted at once the supers just long enough for 4 sections, and of course the hive-body or brood-chamber the same length, and the frames of the proper length to fit it.

This figure shows the arrangement I use, or, rather, that I prefer, for I

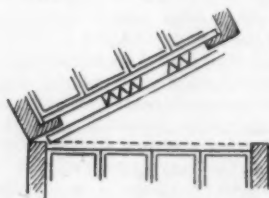


have other kinds on hand also, but I will eventually replace them. Once the arguments advanced in favor of the standard Langstroth frames de-

cided me to construct several hives of that kind, but I soon was sorry that I did, and I am sorry yet.

There are several advantages in using strips both below and above. In the first place, the sections are protected all around against propolis and travel-stains. Another feature needs a longer explanation: Suppose a super has strips under the sections but none above. In my locality, with a slow honey-flow, it is impossible to prevent entirely the building of burr-combs between the frames and the supers. Suppose we put on a second super and want it under the first. We lift the first, the burr-combs break off, and leave the pieces attached under the strips of the super. We place the new super on the brood-nest, and then the old super on top of it. It is impossible to scrape the burr-combs absolutely clean from the wood. And the least remains of it induce the bees to rebuild a burr-comb between the strips and the sections below. And when next time we lift the top super said burr-comb will pull off the top of the section, or, if it does not, it will give us some cleaning to do.

With strips both above and below such trouble does not occur. It is not even necessary to clean the strip. A burr-comb between the 2 supers will not spoil the sections. If it does not break off it will pull up the top strip of the lower super without damaging the sections. The following cut will show at once how this happens:



FENCES.

The first question that might be raised here is whether separators should be used at all or not. So many conditions contribute to influence the surplus obtained by any colony that it is almost impossible to tell whether such or such other thing has given better results or not. As far as I can guess at, I think that more can be obtained without separators, but how much I don't know. I think that under favorable circumstances, such as a heavy flow, very strong colonies, etc., the difference is perhaps hardly noticeable, but that under adverse circumstances it may amount to a good deal.

When separators are not used the 4 bee-way sections should be used. They



give better communication in all directions, and they are more regularly filled than the 2 bee-way, the inside openings inducing the bees to build the combs more regularly. The chief objection to these sections is that un-

less very carefully handled the corners are apt to gouge into the other sections. The cut shows how it "happens."

To me the chief advantage of using the fences is that I can use plain sections with them. So far as the "separating" is concerned, I doubt whether they are any better than the other kinds.

## PLAIN SECTIONS.

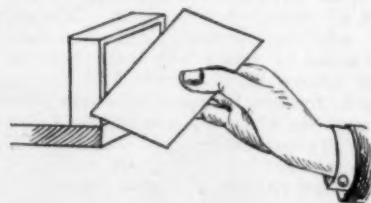
The plain sections are decidedly the best. They look better; the honey coming almost level with the edges of the section makes it look well filled, or, as we say in the South, "plump full." Side by side an ordinary section looks as if not completely full, or, as James Heddon used to say, "lean;" while the plain section looks "fat."

It is claimed that the corners are filled better, owing to the fact that the bees can reach them more easily. I don't know to what extent that is true. To have well-filled sections it is necessary to put in full sheets of foundation nearly touching the wood all around, or better, fasten the foundation to the wood all around with melted wax.

Those who use melted wax for the first time are sure to put on entirely too much. With a Van Deusen tube, or spoon that I described in another contribution, and a little practise, but very little wax is used. Perhaps a drop at each corner would be enough, but I have not tried it.

The strips above and below the sections are very simple and cheap affairs when using plain sections. Get from any wood-working shop long strips ripped out of 1½-inch stuff and cut them yourself of proper length, and there you are. With bee-way sections it would be necessary to have scalloped strips, rather costly, and which might not always fit the sections as closely as desirable.

The plain sections thus protected need but very little cleaning, only on the faces. One scraping more on each side with a joiner's scraper is about all that is needed:



## PACKING HONEY.

I sell in the home market. The best package I found is a common lard-can. It costs 25 cents, and can be returned and used almost indefinitely. If the grocer keeps them he pays 20 cents each. That is the price at which he resells them to farmers for packing lard. In selling chunk or extracted honey, the can is usually weighed with the honey, and the whole paid at the price agreed on. In that case I get sometimes a few cents more for the can than I paid for it.

The packing is easily done. Two or 3 thicknesses of paper are placed at the bottom of the can, then a layer of sections, as shown in the cut. The



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sections are crowded against one side and a piece of paper folded and placed at the opposite side, so as to prevent any lateral movement. Two or 3 thicknesses of paper come on the top of the



sections, another layer of sections is placed on it in the same way, and then a third, and finally enough paper to keep the whole tight when the cover is on.

One advantage of packing is that the sections can be easily taken out, inspected and replaced, and when it is done the package is in as good order as before, which is seldom the case when a nailed cover is pulled off and nailed back.

Another is that the ants can not get in. Here in the South the warehouses, and even the dwelling-houses, are often infested with small ants, which will often succeed in getting into a box or case, especially when the cover has been taken off and put back.

As to the putting of the sections in the supers and taking them out, there is no appreciable difference between the T-tins and the strips just described. It can be done as quickly with one as with the other, and the same process can be used when taking all the sections out at once.

Knoxville, Tenn.

### Do Bees Puncture Fruit ?

BY JOHN KENNEDY

I feel called upon to say something under protest in regard to the editorial, "Bees Don't Puncture Fruit," on page 653. I am now, and have ever been since I began handling bees, an all-around friend to the busy bee. I have proven that in several articles I have written, both to the different fruit-journals, and, I think, to the American Bee Journal I have written on this very subject. Some years ago quite a discussion appeared among the fruit-growers about the bee being destructive to the different fruits, and carrying the pear-blight, and the bee-men defended the bee, etc. At that time I also felt called upon to defend the bee, and to write several articles along that

line, for I was both a bee and a fruit man then as I am now, being about equally interested in each. But all history, no matter on what subject, when given to the public, should be correct and true to facts.

Last year I noticed my Scuppernong grape arbor being depredated by some unknown enemy. There was a small puncture in each grape, which, of course, caused the bees to flock to these grapes, whether they were the depredators or not in the first instance. And being such a staunch friend of bees, and believing them harmless as to puncturing fruit of any kind, I was disposed to clear them, and look for the probable enemy. I noticed wherever I went about the arbor I could see certain birds fly away in a rather guilty manner, and I was ready to believe they were doing the mischief. So I went gunning for birds, when, of course, I could never kill but one at a time, as, if there were more in the arbor, they would all fly after the first report of my gun.

Well, this went on for some time when I began to discover so few birds visiting the arbor, and every individual grape would become punctured just as soon as it became about ripe, until I finally began to think there was some other enemy depredating those grapes. I watched as closely as I could during the daytime, and at last the birds quit the arbor altogether; but during all this time I could find thousands of bees there—a bee to every ripe grape; and, another thing, every grape was so uniformly punctured by about 1/16 inch, and so evenly done as if a pen-knife had been used, and always along the side of the grape, beginning near the top or bud end and extending down the side. Finally, not being able to discover any other enemy, I was forced to the belief—greatly against my will, however—that it was none other than the honey-bees doing all this mischief. By way of giving the benefit of a doubt in favor of the bees, I will frankly say I never looked for nocturnal insects. The language of the Editor in the item above referred to, is as follows:

"It has taken a long time to exonerate the bee from this charge [puncturing fruit], but it is now found that most of the injury is done by crickets and June-bugs. Prof. Garman, of the Kentucky Experiment Station, found 2 varieties of tree-crickets working vigorously at night, cutting holes in the fruit named [grapes, peaches and plums]. He expresses the belief that these crickets are the chief culprits in puncturing thin-skinned fruit. One variety of June-bug was found in the same business."

Now, in reply to all the Editor quotes from Prof. Garman, I will frankly say I have never suspected or watched for nocturnal enemies in my investigations, and I don't know that I ever heard of the night cricket before. We have here a leaping cricket that has nocturnal activity, but it was always looked upon as a harmless thing, doing most of its mischief in kitchens, like the roach, hunting scraps of waste peculiar to a kitchen. We have the June-bug, but I never saw one on a grape or any kind of fruit except the figs, and never on the fig until it begins to sour, when about the same time the honey-bees can be found in large numbers also. But the June-bug never remains here until August, and the Scuppernong grape with us ripens about Aug. 20.

I would be very glad indeed to find the honey-bee innocent of this mischief. And, as I said in the beginning of this article, I accuse the bee under protest, but if the evidence is so overwhelming we are forced to condemn them. Even now, under the suspicious circumstances, I am willing to give the bees the benefit of a doubt, but I shall watch the coming crop very closely as it ripens in the next 2 weeks, and if I find any other enemy, and can clear the bees of this slanderous charge, I will record my observations by sending my experience to the American Bee Journal. I am more than anxious to find the bee innocent of this mischief.

Another defense I gave the bee in my letter to the fruit-paper referred to, was clearing them of carrying blight to the pear-trees, and I well remember one special argument I used, which was, the fact that I had seen in my orchard pear-trees blighted that had never bloomed; and why would a bee be visiting a pear-tree without blossoms? Also, in the same orchard, I found pear-trees in full bloom with thousands of blossoms and bees, that never blighted, while many near by did.

I think I am ready to clear the honey-bee of carrying pear-blight, but this grape business makes me shake my head in a suspicious manner, meaning, Miss Bee, I have my doubts about you, after my gallant defense in your behalf heretofore. But I will hold my peace until this crop of grapes comes and goes, and if you don't show your meanness by destroying my grapes, I will embrace you as a victim of vile slander.

Selma, Miss., Aug. 8.

**Honey as a Health-Food.**—This is a 16-page honey-pamphlet intended to help increase the demand for honey. The first part of it contains a short article on "Honey as Food," written by Dr. C. C. Miller. It tells where to keep honey, how to liquefy it, etc. The last part is devoted to "Honey-Cooking Recipes" and "Remedies Using Honey." It should be widely circulated by those selling honey. The more the people are educated on the value and uses of honey, the more honey they will buy.

Prices, prepaid—Sample copy for a two-cent stamp; 50 copies for 70 cts.; 100 for \$1.25; 250 for \$2.25; 500 for \$4.00; or 1,000 for \$7.50. Your business card printed free at the bottom of front page on all orders for 100 or more copies. Send all orders to the office of the American Bee Journal.

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**Amerikanische Bienenzucht**, by Hans Buschbauer, is a bee-keeper's hand-book of 138 pages, which is just what our German friends will want. It is fully illustrated, and neatly bound in cloth. Price, postpaid, \$1.00; or with the American Bee Journal one year—both for \$1.75. Address all orders to this office.

# American Bee Journal



Send Questions either to the office of the American Bee Journal,  
or to DR. C. C. MILLER, Marengo, Ill.  
Dr. Miller does not answer Questions by mail.

## Wants Positive Cure for Foul Brood

1. Is there any positive cure for foul brood, other than starving it out of the bees, and putting them into a clean hive?
2. Is there any law in Pennsylvania to prohibit people from distributing the disease? We have been troubled with foul brood in our apiary for the last 12 or 15 years in succession.

PENNSYLVANIA.

ANSWERS.—1. I don't know of any. But it isn't necessary to use a clean hive; the old hive may be used, but not the old combs.

2. Perhaps some other Pennsylvania bee-keeper will answer this.

## Best Hive—Telescope Hive-Cover

1. What kind of a hive is the best for comb honey; for extracted?
2. Is the Danzenbaker hive a good comb-honey hive?
3. Could I use the Danzenbaker hive for extracting? If so, state how to use it.
4. Can I use the telescope cover 11¼ inches deep over the Danzenbaker hive in the summer-time, or is it only for winter use?
5. Is the telescope cover better than the excelsior cover?

OHIO.

ANSWERS.—1. After trying several different hives, I have found nothing that suits me better than the 8-frame dovetailed; but unless I expected to give very close attention to my bees I should prefer 10-frame.

2. Either the 10-frame dovetailed or something larger.

3. Some speak highly of it. At one time I had thoughts of adopting it for my own use, but after trying it on a small scale I did not like it well enough to adopt it.

4. It can be used for extracting just as you would use any hive for that purpose.

5. A telescope cover may be used summer or winter anywhere where it is large enough to go over the parts desired.

6. That's a question that can't be answered in a single word. A good many things must be taken into consideration. Some prefer one and some the other. For my own use I prefer the plainest kind of a cover, only so it is waterproof, close-fitting, and with an air-space to make it cool in summer and warm in winter. But if I were to change places with some one who is using a telescope cover, I might prefer the telescope.

## How Late to Remove Surplus Honey

What time in the fall, as near frost as possible, do you think that a bee-keeper ought to take off section honey?

Do you think 2 weeks before frost would be too late? Sometimes we do not have a killing frost until the last of November here, and sometimes we have a killing frost the 9th of November.

If the temperature goes below 48 or 50 degrees above zero by the middle of the day, I hardly ever open a hive in the fall. At least, not if much below that. Bees here store sometimes as much honey in the fall as they do in the spring, when the summers are not so severe and hot as to kill out a good many of the bees—that is, when the colonies are strong they do better in the fall. All bee-keepers in this locality leave on the hive all winter the sections that are unfilled in the fall. We had but 3 freezing days last winter that the bees did not fly out; on all other days they

flew out at some time during the day when the weather was warm enough.

GEORGIA.

ANSWER.—It's a matter not of frost but of flow. Or, rather, cessation of flow. If you were told that 2 weeks before frost is the right time to take off all sections—and I take it that what you are talking about is the right time to take off all sections for good—what guide would that be to you? for who can tell 2 weeks, or even 2 days, beforehand just when the first frost will come?

No, the time to clear all sections off the hives is when all storing of the right kind is done. All storing "of the right kind," for sometimes it may happen that after the bees cease to store honey of a desirable sort for surplus, there may come again a fall flow of such honey as you do not care to have in sections, but will be all right for the bees to store for their own consumption. The time to take off all sections will depend upon pasturage and seasons, and possibly on other things. So it may be 2 weeks before first frost, and sometimes it may be 6 weeks or more. Indeed, in some cases it might not come till after frost. When you have reason to believe the bees will do no more storing in sections, or at least will store no more such honey as you care for in sections, then leaving them on longer will only be a damage. If it is fashionable to leave sections on all winter in your locality, then there's one thing in which you will do well to be unfashionable. The more the bees fly in winter, the worse it will probably be for the sections that are left on.

## Catnip Honey—Supers and Separators—Getting Rid of Ants

1. Is catnip honey fit for table use? It seems to taste very strong.
2. What kind of a super would you advocate using—the T super, or the slotted section-holder super, for bee-way sections?
3. Would you advocate using separators in T supers?
4. What is the best remedy for keeping very little yellow ants from attacking the honey in the honey-house? Some years they are all over the house and attack anything sweet. They are a "fright" when they attack a stack of comb honey ready for market, for the only way I know to get them off is to blow them off.

IOWA.

ANSWERS.—1. Catnip honey has the reputation of being fine for table use. Unless you have catnip in great abundance, and little or nothing else yielding at the same time, you can hardly be sure that you have pure catnip honey; and it is impossible that the very strong taste comes from some other honey being mixed with the catnip.

2. I prefer the T-super.

3. Yes, if the honey is to be handled as much as will be if put upon the market, separators should be used. If the honey is merely for home use, then it doesn't matter.

4. Trace them to their nests, and give them a good dose of bisulphide of carbon or gasoline. You may also pile the honey on a platform with feet which set in some sort of dishes (oyster cans, or old cans of any kind), the dishes being kept filled with water or oil.

## Late Increase—Experience in Super-Work

I have one Langstroth 8-frame hive crammed full of bees. On July 4 I cut out 4 queen-cells to keep them from swarming. On the 11th I examined again and found 7 queen-cells—4 on one frame, 2 on 1, and 1 on 1 frame. I have a super on the hive, but the bees don't seem to make any progress in filling it. I have the queen's wings clipped. I have an extra hive ready to put the swarm in.

1. Is it best to allow natural swarming? I would like to increase to 3 or 4 colonies. What is best to do in my case?

2. In putting starters in the super sections I used some old comb in 4 sections; for the balance I used comb foundation. The bees have now capped some of the sections started with old comb, while they eat holes in the comb foundation, and even take the comb foundation out altogether.

ALHAMBRA.

ANSWERS.—1. It might have been best to allow natural swarming in the first place; but as you have hindered the bees by cutting cells out twice, and as there is probably very little nectar coming in, it is possible that natural



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swarming will be given up, and if you want to increase to 3 or 4, the surest way will be to take matters into your own hands. If you have no other way in mind, you might proceed in the way offered to "Iowa," page 329. But you must remember that it's getting pretty late in the season to do much in the way of increasing, and it may not be safe to think of doing anything more than to double. In any case, if little or no honey is coming in, you must be ready to feed bountifully.

2. The season is chiefly at fault. The bees are not getting enough to draw out foundation, although getting just a little more than they need in the brood-chamber, so they put the surplus in the sections that have drawn comb, and dig down some of the foundation to help finish out the few sections filled. There's no help for it except to wait for a better season, unless it be to take off the sections to prevent the bees from destroying the foundation, and allow them enough combs in a second story to store any little surplus they may have.

### What Ails the Bees?

I introduced a queen July 4, and at this date, Aug. 18, there has not been a live bee hatched; but for some time I have noticed early in the morning young bees dead on the alighting-board. The bees in the hive are blacks; the queen is a golden, as are the dead, young bees. What is the matter? Would you remove the queen? OHIO.

ANSWER.—I don't know what is the trouble. From what you say I infer that the queen is laying, that brood is reared, but no young bee matures sufficiently to make its way out of the cell, the immature young bees being carried out of the hive. It hardly seems that the queen is at fault, yet it is barely possible. It looks just a little as if there were poison in the case. If so, then the same trouble ought to appear in other hives. I am sorry not to be able to give a satisfactory answer, but can only plead ignorance.

### May Be Foul Brood

I have a colony of bees that in early summer began to dwindle. I examined them and diagnosed pickled brood. I shook all the bees on new foundation, in a new hive. It was just at the start of the honey-flow, as the forepart of the summer was no good. They now have plenty of honey, but as for the brood or increase it is poor. Some bees hatch; brood all sealed, and lots have small holes in them, and the bees look as though near maturity, and then die. What is the disease, cause, treatment, etc.?

My other colonies have done exceedingly well.

ILLINOIS.

ANSWER.—I should be afraid of foul brood, although you say nothing about the stringy nature of the brood. If you are a member of the National Bee-Keepers' Association, send a sample to General Manager N. E. France, Platteville, Wis. He is an expert in such diseases. If not a member, send a dollar at the same time, and that will make you a member.

### Lapse of Memory—Was Its Cause Mental or from a Bee-Sting?

A rather peculiar thing happened here a few days ago. A young man in this neighborhood was working in the hay-field, and just about noon he was stung on the lobe of the left ear by a bumble-bee. He says that hurt him more than a honey-bee sting usually does, and that it felt as if it had pierced him through from ear to ear. His ear swelled some, but after a short time felt easier. He ate his dinner and went back to the field, where he drove a team hitched to a buck-rake. At 6 o'clock p.m. he unhitched his team and started to the house, riding one of the horses, and at this time his memory ceased to work. He rode to the house and put his team in the usual place and went into the house, of which he remembers nothing. He would ask questions and when answered would ask the same question over again a number of times, and from this time until 12 o'clock noon the next day he remained in this condition. He says "he was a walking, unconscious man." His people tried in every way by questions and other conversation to get him to remember, but without avail.

Just about 24 hours after he was stung his memory returned. Those 24 hours of his life to him are blank. Did the sting cause the trouble? or what, in your opinion, was the cause?

I have made diligent inquiry as to whether he could have been stunned or bruised in any way. There were no signs on the body of having been hurt in any way. A slight soreness was felt in the back of the neck and shoulders. He went to sleep in the forenoon, and when he awoke he was himself.

We are all anxious to have your opinion on this case.

IOWA.

ANSWER.—The case is a remarkable one, but by no means without a parallel. Every now and then we hear of some one who seems to lose his identity, perhaps wandering away from home and friends, then after a time resuming his former identity, but with no recollection of what transpired during the time when he was not his usual self. Sometimes a person of that kind may be lost for years, and sometimes the mental machinery may be out of running order for only 2 or 3 hours. It is not impossible that in the present case there might have been the same lapse if the patient had not been stung at all. He was stung before noon, suffered from the pain, but recovered from it and did a half-day's work before the mental trouble occurred. If the trouble came on 5 or 6 hours after the sting occurred, might it not have been just the same if it came on 24 hours, a week, or a year after the sting, and had the sting really anything to do with it? Yet it may not be wise to say the sting had nothing to do with the mental difficulty; while not being responsible for the trouble it may have been the "last straw that broke the camel's back," in which case it might be called the exciting cause, although a dozen such stings at another time might have no effect of the kind whatever.

### Sweet Clover Seed—When to Sow It

Have you any sweet clover seed for sale? If so, what is the price per pound by mail? When is the time to sow it—in the spring or fall? PENNSYLVANIA.

ANSWER.—I have no seed for sale, and don't know where you can get it, unless you want the yellow kind, and by looking back you will see that Mrs. Amos advertises that. You can sow fall or spring, but sowing this fall will gain nothing over sowing next spring, for the fall sowing will not come up till the next spring.

### Shaken Swarms or Increase by Dividing—Putting on a Second Super

My experience with bees extends only 2 years back, and the longer I keep them the more interested I become in them, and the less I find out I know about them. I have 16 colonies now. This year was an unusual one for excessive swarming. I got 5 swarms from 2 colonies.

1. I have read some about shaking swarms, but I don't quite understand it. How can a person divide a colony of bees and prevent them from swarming?

2. Is there any way one can make a new swarm produce honey in the supers before they get all of the brood-chamber full? What can a person do to induce them to store honey in the supers?

3. I have several colonies (this year's swarms) that have their brood-chambers all full of honey and brood, but they don't seem to want to go to work in the supers. Just a few crawl around in the supers, and we have fine, sunny weather every day. I have always been told by old bee-keepers that the new swarm is the one that stores the surplus honey that year, but I have never yet had a pound of honey from a new swarm. About all they will do is to fill their brood-chambers, and by that time fall weather has set in, and the honey season is over. My experience has also been that the old swarm, or last year's colony, is the one that gives me the surplus.

4. Last year I had a colony that filled one super nearly full of honey, so I was advised to put on another empty super between the full super and the brood-chamber, and that the bees would go up into the upper super and finish capping that over before they went to work in the lower super. But about a week after I went to look at them, and, behold, all the honey from the upper super was gone. What had

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become of it? They did not put it in the lower super. That was one experience. This year I had a colony with the super nearly full of honey, and instead of putting the empty super between it and the brood-chamber I put it on top of the super that was nearly full. I have been watching them ever since, and they just simply stopped storing any more honey, either in the super that was nearly full, or in the empty one that I put on; but instead began to put bee-bread in some of the empty cells, and I believe if I had left both supers on the queen would have gone up and laid some eggs in them.

5. If a person has an out-apiary, which I expect to have next year, how can he manage that and get the swarms if he is not on the ground all the time? OREGON.

ANSWERS.—1. When you shake a swarm, it is a good deal like natural swarming, and ought to prevent swarming just as much as a natural swarm. When a natural swarm issues, part of the bees go with the old queen, and you can imitate that very closely when you shake a swarm. Simply take from the hive all the combs, taking with the combs enough bees to take care of the brood, making sure to leave the queen in the hive on the old stand, put the combs of brood with adhering bees in a new hive on a new stand, and that's all there is to making a shaken swarm. You see you have on the old stand just what you have in a natural swarm, with the advantage that you have *all* the field-bees in your artificial swarm; at least you will have all of them within a day or so, for the field-bees that leave the hive on the new stand will for a day or so return to the old stand and join the swarm.

2. The instinct of the bee obliges it to take care of its own nest first thing, and yet, after it has started its brood-nest and the queen has begun laying there if you put on the hive a super in which the bees had begun storing before they swarmed, they will store honey in the super at the same time they are working in the brood-chamber, provided, of course, that they are gathering enough to work in both places.

3. If bees are to store in the supers, there must be nectar coming in from the fields, and it is just possible that in some cases there was not enough to be had in the fields, so of course they would not store any surplus. Let me tell you one thing you can do that will make the swarm stronger, and so make more sure of its storing surplus: If there be a somewhat even division of forces, it may be that neither the swarm nor the mother colony will get enough from the fields to do super-work, but if one of them be made extra-strong it may be able to do surplus work. So when you hive the swarm, set it on the old stand, putting the old colony close beside it facing the same way. Then a week later move the old hive to an entirely new place. The result of that will be a large accession of bees to the swarm, for all the field-bees that belong to the old hive, when they return from gathering in the fields, will go straight to the spot they have been used to, and not finding their own hive there they will join the swarm.

4. The advice to put the empty super under the one that is nearly full is all right if you are pretty sure the bees will keep on storing; otherwise it is better to put the empty super on top, unless, indeed, you think there will be no more storing, and then no empty super should be given at all. In the first case you mention (the bees carrying the honey down from the raised super), the bees most likely carried the honey down into the brood-chamber. In the second case, with the empty super above, they stopped work simply because they had nothing more to do. The trouble was the same in each case, viz.: the stoppage of the honey harvest. And there's nothing you can do, nor that the bees can do, to make matters better when the flowers have ceased to yield nectar.

5. Perhaps there is nothing better you can do than to get ahead of the bees, and shake swarms at least a little before they have a chance to swarm naturally.

### Tiering Two Weak Colonies for Wintering

1. In the event of colonies not being strong enough for wintering, is it a good plan to tier 2 hives with a zinc-board between them, thus allowing the combined heat to keep the bees warm enough—the wintering to be outdoors? I have some good queens and I dislike very much to destroy them in the event of the necessity of uniting.

2. Is it too late now (Aug. 10) for a virgin queen to commence laying and breed sufficiently to make a good colony for wintering? She comes from a \$2 red-clover (?) strain.

3. Is it safe to put bees in winter quarters without a full complement of filled frames? It seems to me that if 6 frames had the winter supply, or possibly 5, filled by the incomplete number of bees, the plain division-board moved close to the frames and a small sack filled with plauer-shavings or leaves placed tightly in the vacant place in the hive, it might result favorably. Am I right in this? I am feeding to stimulate brood-rearing, but I fear the time is too short to get strong colonies this poor year.

ILLINOIS.

ANSWERS.—1. I've been sitting for some time, chin in hand and elbow on knee, trying to think how to answer that question. If I say yes, and everything comes out all right, you will have 2 colonies next spring instead of 1, and very likely you'd rather have 2 weak ones than 1 strong one. But if you unite in the usual way, you will be surer of their living, and it is better to have 1 live colony than 2 dead ones. Something depends upon the strength of the colonies. If they would make no more than a fair colony when united, then it will probably be better to unite. If stronger than this it might be well to try the tiering. Another thing to be considered is the risk of queens. Some have succeeded with colonies thus tiered in spring, while others have had one of the queens killed. Some have thought that such killing is more likely to occur if the bees are hybrids. But all this round-about talk will hardly blind you to the fact that I really don't know what is the right answer to your question.

2. Not too late, provided she has bees enough to cover about 3 combs, and there is enough pasturage for them to keep gathering till the middle of October. If pasturage is lacking, you must feed.

3. Yes; some think it is even better to take out one or more frames, all the time provided there be no scarcity of stores, and you are speaking of "filled frames." Six frames ought to accommodate a very strong colony. The "poor year" can hardly be considered in the case, if you feed to make up for it.

I thank you heartily for your kind words in a letter accompanying these questions.

### Wiring or Splinting Shallow Frames—Shallow or Deep Supers for Comb Honey?—Full Combs for Spring Building Up of Colonies

1. Would you advise wiring or putting splints in shallow extracting-frames (5½-inches deep), or would they be as well without wire or splints?

2. Would you advise using shallow extracting-supers, or deep supers, when running for comb honey? If deep supers, tell your objection to shallow ones?

3. Do you think it is better to run for both comb and extracted honey on the same hive?

4. Where do you get frames full of comb to build up colonies in the spring, as you say you get your colonies 2 or 3 stories high? And when the honey-flow comes you reduce them to one story, and put on supers; then what do you do with hive-bodies full of comb when you put on supers, or have you a different way of manipulating in spring?

MISSOURI.

ANSWERS.—1. You can get along without any sort of support for the foundation by being more careful in handling the frames and taking a little more time with the extractor, especially while the combs are new. The time of putting in the supports must be figured against the extra time of manipulation without supports. On the whole, I think I would rather have the supports, especially as the time of putting them in may be in winter, and the extra time of handling the combs comes at a busy time.

2. I don't know of any objection to the shallow extracting supers except that the combs cannot be used interchangeably with those in the brood-chamber. If I were running for extracted honey, I think I should prefer the shallow super. Fortunately, the case is one in which you can experiment without much trouble. Try part of each. If you find you like better the shallow, there will be no trouble afterward in having more shallow combs and using the deep ones all in brood-chambers, especially as you probably will want more brood-combs as the years go by. If you find



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you like the deep combs better, you will find no trouble afterward in using the few shallow supers along with the deep ones. I don't see that running also for comb honey makes any particular difference in the case, unless it be that you think there is a possibility afterward of running entirely for comb honey, and if there be such a possibility then you should have no shallow supers.

3. I don't know. I feel pretty sure it isn't best for me; but under different circumstances I might prefer it.

4. Before the harvest no colony ever needs more than 2 stories, and a good many of them need only one. So you see I don't need an extra story for each colony. Some, however, that do not need an extra story will have one all the same, partly as a precautionary measure, allowing them the chance of using the extra room should they need it, and partly for the sake of having the bees take care of the idle combs. When the time comes to reduce all to one story and put on supers, the extra stories—some of them—will be piled up several stories high, over and under colonies that are rather weak and are allowed to build up, and some of them will be used in starting nuclei and new colonies. Some of them will be needed to be filled with honey, so as to have combs sealed solid full to be used wherever needed the following spring, and sometimes a story filled with empty frames will be allowed to stand until the worms begin work in them, and then I wish I had been a better beekeeper so as not to allow such things to happen. Some colonies will be lost in winter and spring, and some will be doubled up in spring, some empty combs will be taken from the hives in exchange for the surplus combs saved over and in these ways there will be enough combs to furnish the extra stories needed in the spring to begin over again the year's round.

## Bees Using the Old Comb

I put bees in a Danzenbaker hive in 1905; in 1906 they swarmed, and in June they hatched out the first crop of bees. Will they continue to use the old comb, or should that be taken out? If so, when—or will they continue to use it?

MISSISSIPPI.

ANSWER.—Your question, practically, is whether comb needs renewing after a certain length of time, or whether the bees will continue to use it after it is several years old. It has been proven very satisfactorily that the continual use of combs by the bees for a number of years does not cause deterioration so as to make it advisable to renew the comb. Indeed, I have in my own apiary combs a third of a century in use, and the bees use them just as well as ever. I am not sure whether I fully understand what you mean by that "first crop of bees." When a swarm is hived, the queen begins laying very soon, and 21 days after the first egg is laid the first young bee will emerge from its cell, and there will be a constant emerging of young bees from that time all the time until breeding stops in the fall, so it will hardly do to say that there is any "crop of bees" in the case.

## Bees Superseding Queens

I had a prime swarm issue June 15, introduced a shipped queen July 6, and when I took the old queen out I cut out 2 ripe queen-cells, and introduced the new queen. In 15 days I found 3 new queen-cells ready to seal. Will you please give me the cause of this?

VIRGINIA.

ANSWER.—There was probably nothing out of the usual course of events. The regular thing is for every queen to be superseded when 2 or 3 years old, and the time for superseding is usually toward the close of the harvest, although it may be more commonly than supposed right after swarming. June 15 you hived a prime swarm, and, the queen being old enough to be superseded, the bees started 2 queen-cells not many days after being hived, and if they had not been disturbed there would have been a young queen from one of these to supersede the old one. But you cut out these cells July 6, at the same time removing the old queen and introducing the new. Then as soon as the new queen had fairly got to laying, or about a week after you had put her into the hive, 2 more queen-cells were started, which you later found ready to seal. On just what grounds the bees based their reasons for starting these cells I don't know. It may be that there was still left the old feeling that it was

necessary to supersede the queen, for conditions had hardly changed enough to take that idea out of their heads. But it is a common thing—probably much more common than generally supposed—for queen-cells to be started when a new queen is introduced. The bees have been without a laying queen—the queen in the cage is not to them a laying queen—she doesn't lay what seems to them a satisfactory number of eggs for some days after getting out of the cage, and what more natural than that the bees should think her a proper subject for superseding? But before there is time for a young queen to emerge, the queen gets back to her full quota of eggs, and the bees decide that she is to continue in office. At any rate, it is the common thing for queen-cells to be started as they were in this case, and then to be destroyed before coming to maturity.

## Queenless Colony

I will call your attention to my robbing question on page 671. I did as you told me, and was very successful. The robbing stopped, and the queen laid nicely, but they had a few queen-cells which I cut out, and a few days later I opened the hive again and found the colony queenless.

1. Was it a mistake to cut out the queen-cells?
2. Is it worth while to introduce another queen?
3. What was the cause of the colony becoming queenless? and of so many queen-cells in the hive?

All the bee-keepers who saw my queen said I had a very nice one, and robbing was surely stopped 4 weeks before the queen was lost.

PENNSYLVANIA.

ANSWERS.—1. If there was no mistake about a good queen being in the hive, it was all right to cut out the queen-cells. If no queen, then another could be reared from one of the cells.

2. Under all the circumstances like enough it would be as well to break up the colony and unite with others.

3. It is not entirely clear just when the colony became queenless. Possibly the robbers may have been the guilty parties, and it is possible the queen may have been accidentally killed when you had the hive open. The queen-cells would naturally be built on the death of the queen. It would also be nothing very unusual for queen-cells to be built upon the commotion raised by robbing.



## Northern California Convention

The Northern California Bee-Keepers' Association is the name of an organization which was formed at a meeting held at the Court House in Sacramento last Saturday. Quite a number of the prominent apiarists of northern California were present at the meeting, and all of them signed the roll of membership. The objects of the organization, as indicated in a resolution adopted, are the mutual benefit of the members, the advancement of the industry, the purchase of supplies, and the marketing of the product.

The meeting was called to order by B. B. Hogaboom, of Elk Grove, who was chosen temporary chairman, with Charles F. Lewis, of Oak Park, as Secretary. Mr. Hogaboom stated that the meeting had been called for the purpose of effecting an organization of the bee-keepers of the northern part of the State, provided that should prove to be the sense of the meeting. On motion of Mr. Stephenson, a list of the names of those present was made, together with the number of colonies represented, with the following result:

Irvin Myers, Franklin Jay Lewis and Charles F. Lewis, 250 colonies for comb and 250 for extracted; Lester B. Johnson, 250 extracted; J. D. Baker, 100 comb and 1,000 extracted; G. W. Stephenson, 12 comb; Thomas J. Stephenson, 100 comb; B. B. Hogaboom, 315 comb; H. M. Tyler, 250 comb; J. W. McDonald, 40 extracted; W. H. Baker, 80 extracted. There

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were represented a total of 1,277 colonies for comb honey and 1,370 colonies for extracted, making a total of 2,647 colonies of bees. This represents but a small portion of the bee-keeping interests of northern California, but there is no doubt that many of the other apiarists will come into the organization now that it has been formed. A number, indeed, have expressed their intention of doing so.

The general idea of those present was that organization would prove of great benefit to the industry in this section of the State, as it has in other places. It is proposed to collect the product of the members in warehouses in several places provided with good transportation facilities. The honey could then be marketed on warehouse receipts, and better prices be obtained for carload lots than when the bee-keepers sell their output individually and in small lots. It is possible that later on a manager may be chosen to take charge of the marketing of the crop, the purchase of supplies and other business matters. The sentiment of the members is now, however, that it is too soon to take such a step. This is a detail which will arrange itself when the organization is in full working order and stronger than it is now.

The nature of the proposed organization was very fully discussed, the principal speakers being B. B. Hogaboom, F. Jay Lewis, Mr. Stephenson and others. John M. Rankin, United States Special Agent in Apiculture, Bureau of Entomology, stationed at Chico, was present and made a very interesting talk. He advised the bee-keepers by all means to organize, and assisted very materially in perfecting the organization.

It was decided that the local association should affiliate with the National Bee-Keepers' Association. The dues were fixed at \$1 per year, half of which goes for membership in the National Association.

Election of officers resulted in the choice of the following: F. Jay Lewis, President; B. B. Hogaboom, Vice-President; Charles F. Lewis, Secretary and Treasurer. These, with Lester B. Johnson and J. W. McDonald, will serve as directors. They were instructed by the meeting to draw up a constitution and by-laws, to be presented at the next meeting.

### HONEY CROP IN NORTHERN CALIFORNIA.

Conversation among those present developed the fact that the honey crop of the northern part of the State promised to be a very good one. On account of the unusual duration of the rains and the coolness of the season up to very recently, the crop will be about a month late, but prospects are that it will be satisfactory as regards both quantity and quality. Charles F. Lewis, Secretary of the Association, states that a failure of the honey crop of this section of the State has never been known. It is sometimes necessary to feed the bees during the early part of the season, as has been the case in some instances this year, but the final outcome is nearly always about the same.

Last year the honey output of California was a record-breaker, being over 10,000,000 pounds. The 1906 crop will be very much shorter. In fact, grave fears are expressed as to their being any crop in the southern part of the State. The continued wet weather has put the bees back about a month, and they can not make this up in the south as they can in the northern part of the State. Most of the honey in Ventura and other southern counties is stored in the month of May or not at all. This year there was very little in that month. At present it is too early to estimate the probable output of the State. Conditions have improved very greatly within the past few weeks, and it is possible that earlier forecasts may prove to be somewhat under the actual output.—California Fruit-Grower, of June 30, 1906.

## NATIONAL AT CHICAGO

### Report of the 36th Annual Convention of the National Bee-Keepers' Association, held in Chicago, Ill., Dec. 19, 20 and 21, 1905

[Continued from page 671.]

Mr. E. T. Abbott then addressed the convention as follows:

#### POULTRY-KEEPING FOR THE BEE-KEEPER

I want to say that I haven't any paper, neither do I intend to give you the kind of poultry talk that you hear every day. When Mr. Hutchinson asked me to take some

part in the program down in Texas, I suggested that he put me on for this talk instead of some bee-keeping talk that I had been talking all these years. This poultry talk of mine is not along the usual lines, and I do not know but what it would be just as well if I didn't give it all. I will talk just a little while along the lines I usually talk, and if you don't like that kind of thing we can easily enough change off. I remember Mr. Root heard me on this poultry talk once down in Missouri. He came in and sat down in front of me and dropped his head down, and put his hand over his eyes and looked fearfully discouraged, and I didn't know but what he was going to cry. Some time afterwards he straightened up. He said afterwards that it wasn't the kind of talk he was expecting, just as though I could teach A. I. Root anything about bees.

Poultry is a broad subject; it is much broader than you can discuss in one evening. There were two or three old hens up in Wisconsin, that got under a pair of stairs and began to scratch and scratch around the leaves and dirt, and after a while they scratched up some several thousand dollars, and the money was found and it got into the papers. I do not know whether or not you read it, but it was in every newspaper, almost, in the United States. Now, hens have been scratching up money all these years, which amounts in Missouri, I think, to something like forty millions every year; in other States they have been scratching up equal amounts, and nothing has been said about it. We have been looking all these years for something we could do in connection with bee-keeping. I will tell you what I do. I milk a Jersey cow and keep some fine poultry, and have for years, and I have been advocating that inbreeding for 10 or 15 years. When I first began to advocate it, like Mr. Holtermann, they said I was upside down, and I was talking nonsense, but I went on until I had some of the finest golden Wyandottes I ever had in my life, the most perfectly marked. The boys thought they were such a good mark for marksmanship that they killed them off.

The first secret of success is to know how, and in order to know how you have to study the hen. She is a peculiar creature. She has had but little study. The reason has been that men inherited a theory that in order to make poultry a success they must turn it over to the women, and as the women didn't know much they wouldn't expect them to accomplish much; it was a kind of a small, one-horse business and the woman was a kind of a small, one-horse affair, and it could all be turned over to her and it would be one-horse all the way through. The man didn't have much interest in it only when he wanted a little money to buy his tobacco, or to get something when he went to town, and then he went to the old woman's purse and got enough to buy a plug of tobacco or a drink. That is about all he knew.

Mr. York—That was in Missouri, wasn't it? [Laughter.]

Mr. Abbott—No, sir; all over.

The great secret of success in keeping poultry is to make the poultry comfortable. I want to give you some good rules that will work out in practice. Now in order to make a hen comfortable, the conditions and surroundings must be such as are adapted to hens. Some people think a hen has no feeling; they think it isn't an animal; it is a kind of automatic machine to grind out eggs and to eat for Sunday dinners; but there is a vast deal more to a hen. If you expect to get eggs—and that is all hens are worth—that is what there is in a hen, is eggs—if you can't get eggs out of the hen you can't get anything out. In order to get eggs out of the hens you must put eggs in. You can't get anything out of a hen you don't put into her. You put it in in the form of feed, and take it out in the form of eggs. And the food must be first, enough to nourish the hen's vital energy, and to build it up; and then there must be sufficient superabundance of food to make eggs, and eggs should always be in a hen, so that you have a circle. You feed a hen eggs in food, and the hen gives you other hens in eggs, and the circle keeps going around and around, but you must supply fuel to run the machine. There has to be eggs put into the hens and then you will get eggs out of the hens.

Somebody in "Gleanings" said: "Gleanings" always has things in it that are so, and things very wise, and sometimes, a small illustration. There was an old man, who, in his condemnation of his poultry business, said he had hatched



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320 chickens and only raised 200. Now, a man who doesn't know any more about raising chickens and hens than that, ought not to go in the business. He ought to keep out of the poultry business and go to something else. Now, I say you must make the poultry comfortable and the first essential of comfort is a comfortable home in which the poultry can live. I experimented a little the winter before last to see if it were possible to increase the egg-production, and have a simple house that was inexpensive. I prepared the roost so that I could drop a curtain right down in front of it. They say hens should have air. I believe they should have some air. Every night I went out to my biddies, just like the mother puts the babies to bed; I went out with the lantern, and found them all lined up on the roost in a nice row, and they would talk to me, and I would pull down the curtain and they would stay there perfectly quiet till I went out in the morning; and in the morning one old hen was the first one to begin, and she would talk in hen fashion and get down off the roost ready for her food. I don't suppose they knew any different, and I don't suppose they appreciated it. The fool hen hasn't got sense enough to know when she is warm, but every day she laid an egg. The average farmer expects a hen to lay eggs under average conditions. I presume in Illinois 9-10 of the hens roost in trees, and 9-10 of the men think hens ought to roost about 40 feet, more or less, from the ground in the tree; and when the mercury is down 20 degrees below zero, that she ought to come out of the tree and hunt around in the snow for a dry place and lay an egg as a return for the kindly treatment she gets! Do you know what I would do if I was a hen and got that kind of treatment? I would



EMERSON T. ABBOTT.

swear by the eternals I would never lay an egg. You can't expect the hen to lay under such conditions. She couldn't lay if she wanted to, for it takes all of the hen's vital energy to keep herself warm and live, and she hasn't any extra vital energy for eggs.

Then a word about the hen-roost. The old-fashioned roost was built up on an angle of 45 degrees, and the poles ran one above the other. In the evening when the hens went to roost those poles were loose at one end or the other, and, of course, if they are loose like that at both ends every hen will like the middle best; and every hen wanted to get on the top pole. Hens are a good deal like men, they want to get on the top pole, and when they are trying to get there they don't care a continental whom they knock off. And so the hens start up one after the other, climbing up one on top of another, and you hear them squealing and screeching, and all sorts of noises, and it takes the hens from one to two hours to get settled down, every time. Now, that kind of roost is not the kind of roost to build. The hen-roost ought to be on the level, just as all men ought to be on the level. If I could get the men reduced to proper hen-roost style I would accomplish more for humanity than anything else. We are always try-

ing to climb up above some other. If we all had roosts and had to come home at night and get down on a level, can't you imagine what it would mean for humanity?

Now, then, if you want a hen to lay eggs you must keep her comfortable all the time, and I will tell you one of the things you must do. The average farmer likes a chicken for dinner. He doesn't have to cook it, he doesn't have to pick it; and he doesn't care how much his wife has to work on Sunday, if he can go out to the corner and tell yarns and chew and smoke and have a good time, and come back at half past one or two o'clock with half a dozen of his neighbors and have a good chicken for dinner and have a good, jolly time. He always wants a chicken for Sunday, but he never thinks of catching that chicken. He never thinks about getting the chicken ready. But Sunday comes and he says, Well, we better have a chicken to-day; John Smith is coming over from the store with me, and I think we better have a chicken.

Well, mother says, it is all right; she don't want to cross him; she knows what will come. She goes out; and every farmer in the country has two or three dogs—a little dog, a big dog and a dog between; the old lady picks out the chicken and says to the boy, "Do you see that old, yaller-legged hen; I want her for dinner." The boy says, "All right, I'll have the chicken." And he blows a whistle. The little dog comes, and he says, "Sick him, Tige. Do you see that hen?" The hen starts, the boy starts, and the dog starts. Did you ever know one dog to start without all the other dogs joining with him? The middle dog joins in and the big dog and they run through the orchard, and through the barn, and through the cow-shed, and then run back and forth, and finally the old man joins in the chase, and the old woman comes rushing out, and the little dog is hot on the trail, and the hen comes to the fence, and she tries to go through a crack in it, and the old woman grabs the hen by the legs, and she whirls around, and she takes hold of the hen by the head and goes "whizz."

I take what she has done seriously. She has spoiled one hen for Sunday dinner, because a hen that is chased that way isn't fit to eat; and while the chase was going on, do you know what she has done with the rest of the hens in the place? There is the old hen looking out from behind a box, and there is the old rooster over there that looks out and cackles. Now if they have 300 hens they have done something more, they have lost 300 eggs, for a hen has the most delicate, nervous organism of any animal, almost, in existence, and under such circumstances she can not lay eggs. She won't stop right away, but that will be because she can't. If the farmer had 300 hens, the Sunday dinner has cost him 300 eggs, and if they are worth a cent a piece, he has paid \$3 for the hen he had on Sunday that was not fit to eat.

The way to kill a hen, if you must kill them—I hate to kill my chickens—is to take her quietly off the roost in the morning, and when it is daylight, cut her head squarely off and drop her into a barrel out of sight and cover her up. My printing shop is right next to the hotel and they have chicken every day for dinner. Two brawny women come down there and they take those chickens and hack their heads off, and thrash them around in such a cruel way that it makes the chills run over me, and I feel sometimes as though I will never eat another chicken.

Now about the diseases of poultry. When I used to lecture in the Farmers' Institute they were always asking me about the diseases. There is only about one disease in poultry that is very dangerous. About the only disease we have in Missouri is roop; that is, the catarrh of the head, and it gets more aggravated until it gets into the lungs, and finally into the blood, and poisons the hen so that she is really not fit to eat; but if taken at the proper time it can be very easily cured. I can tell you how to cure roop. I say it is a disease of the lungs and bronchial tubes, and about the only way to treat it is wholesale. You can't afford to doctor single hens unless they are valuable.

You find the hens are getting diseased, and the way to tell is if they are snuffing. They call it pip, sometimes. You hear it on the roost at night. That is the danger signal. You want to get busy. Get you some sulphur and a kettle, and put some coals in it. Have your hen-house reasonably tight, and when your hens all get to roost put the kettle in the center of the house where you won't burn it up, and throw about half a pound of sulphur onto those coals, and then go out, unless you feel the necessity of the treatment

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were represented a total of 1,277 colonies for comb honey and 1,370 colonies for extracted, making a total of 2,647 colonies of bees. This represents but a small portion of the bee-keeping interests of northern California, but there is no doubt that many of the other apiarists will come into the organization now that it has been formed. A number, indeed, have expressed their intention of doing so.

The general idea of those present was that organization would prove of great benefit to the industry in this section of the State, as it has in other places. It is proposed to collect the product of the members in warehouses in several places provided with good transportation facilities. The honey could then be marketed on warehouse receipts, and better prices be obtained for carload lots than when the bee-keepers sell their output individually and in small lots. It is possible that later on a manager may be chosen to take charge of the marketing of the crop, the purchase of supplies and other business matters. The sentiment of the members is now, however, that it is too soon to take such a step. This is a detail which will arrange itself when the organization is in full working order and stronger than it is now.

The nature of the proposed organization was very fully discussed, the principal speakers being B. B. Hogaboom, F. Jay Lewis, Mr. Stephenson and others. John M. Rankin, United States Special Agent in Apiculture, Bureau of Entomology, stationed at Chico, was present and made a very interesting talk. He advised the bee-keepers by all means to organize, and assisted very materially in perfecting the organization.

It was decided that the local association should affiliate with the National Bee-Keepers' Association. The dues were fixed at \$1 per year, half of which goes for membership in the National Association.

Election of officers resulted in the choice of the following: F. Jay Lewis, President; B. B. Hogaboom, Vice-President; Charles F. Lewis, Secretary and Treasurer. These, with Lester B. Johnson and J. W. McDonald, will serve as directors. They were instructed by the meeting to draw up a constitution and by-laws, to be presented at the next meeting.

### HONEY CROP IN NORTHERN CALIFORNIA.

Conversation among those present developed the fact that the honey crop of the northern part of the State promised to be a very good one. On account of the unusual duration of the rains and the coolness of the season up to very recently, the crop will be about a month late, but prospects are that it will be satisfactory as regards both quantity and quality. Charles F. Lewis, Secretary of the Association, states that a failure of the honey crop of this section of the State has never been known. It is sometimes necessary to feed the bees during the early part of the season, as has been the case in some instances this year, but the final outcome is nearly always about the same.

Last year the honey output of California was a record-breaker, being over 10,000,000 pounds. The 1906 crop will be very much shorter. In fact, grave fears are expressed as to their being any crop in the southern part of the State. The continued wet weather has put the bees back about a month, and they can not make this up in the south as they can in the northern part of the State. Most of the honey in Ventura and other southern counties is stored in the month of May or not at all. This year there was very little in that month. At present it is too early to estimate the probable output of the State. Conditions have improved very greatly within the past few weeks, and it is possible that earlier forecasts may prove to be somewhat under the actual output.—California Fruit-Grower, of June 30, 1906.

## NATIONAL AT CHICAGO

### Report of the 36th Annual Convention of the National Bee-Keepers' Association, held in Chicago, Ill., Dec. 19, 20 and 21, 1905

[Continued from page 671.]

Mr. E. T. Abbott then addressed the convention as follows:

#### POULTRY-KEEPING FOR THE BEE-KEEPER

I want to say that I haven't any paper, neither do I intend to give you the kind of poultry talk that you hear every day. When Mr. Hutchinson asked me to take some

part in the program down in Texas, I suggested that he put me on for this talk instead of some bee-keeping talk that I had been talking all these years. This poultry talk of mine is not along the usual lines, and I do not know but what it would be just as well if I didn't give it all. I will talk just a little while along the lines I usually talk, and if you don't like that kind of thing we can easily enough change off. I remember Mr. Root heard me on this poultry talk once down in Missouri. He came in and sat down in front of me and dropped his head down, and put his hand over his eyes and looked fearfully discouraged, and I didn't know but what he was going to cry. Some time afterwards he straightened up. He said afterwards that it wasn't the kind of talk he was expecting, just as though I could teach A. I. Root anything about bees.

Poultry is a broad subject; it is much broader than you can discuss in one evening. There were two or three old hens up in Wisconsin, that got under a pair of stairs and began to scratch and scratch around the leaves and dirt, and after a while they scratched up some several thousand dollars, and the money was found and it got into the papers. I do not know whether or not you read it, but it was in every newspaper, almost, in the United States. Now, hens have been scratching up money all these years, which amounts in Missouri, I think, to something like forty millions every year; in other States they have been scratching up equal amounts, and nothing has been said about it. We have been looking all these years for something we could do in connection with bee-keeping. I will tell you what I do. I milk a Jersey cow and keep some fine poultry, and have for years, and I have been advocating that inbreeding for 10 or 15 years. When I first began to advocate it, like Mr. Holtermann, they said I was upside down, and I was talking nonsense, but I went on until I had some of the finest golden Wyandottes I ever had in my life, the most perfectly marked. The boys thought they were such a good mark for marksmanship that they killed them off.

The first secret of success is to know how, and in order to know how you have to study the hen. She is a peculiar creature. She has had but little study. The reason has been that men inherited a theory that in order to make poultry a success they must turn it over to the women, and as the women didn't know much they wouldn't expect them to accomplish much; it was a kind of a small, one-horse business and the woman was a kind of a small, one-horse affair, and it could all be turned over to her and it would be one-horse all the way through. The man didn't have much interest in it only when he wanted a little money to buy his tobacco, or to get something when he went to town, and then he went to the old woman's purse and got enough to buy a plug of tobacco or a drink. That is about all he knew.

Mr. York—That was in Missouri, wasn't it? [Laughter.]

Mr. Abbott—No, sir; all over.

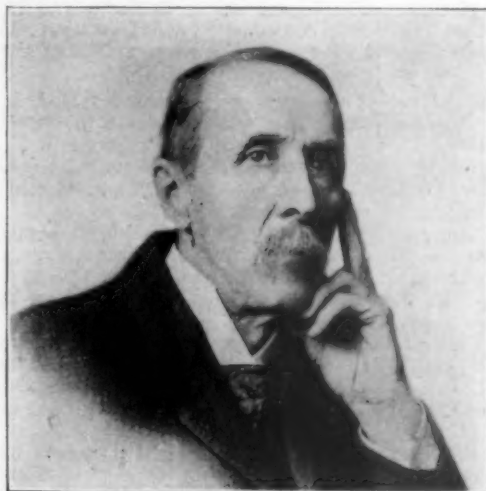
The great secret of success in keeping poultry is to make the poultry comfortable. I want to give you some good rules that will work out in practice. Now in order to make a hen comfortable, the conditions and surroundings must be such as are adapted to hens. Some people think a hen has no feeling; they think it isn't an animal; it is a kind of automatic machine to grind out eggs and to eat for Sunday dinners; but there is a vast deal more to a hen. If you expect to get eggs—and that is all hens are worth—that is what there is in a hen, is eggs—if you can't get eggs out of the hen you can't get anything out. In order to get eggs out of the hens you must put eggs in. You can't get anything out of a hen you don't put into her. You put it in in the form of feed, and take it out in the form of eggs. And the food must be first, enough to nourish the hen's vital energy, and to build it up; and then there must be sufficient superabundance of food to make eggs, and eggs should always be in a hen, so that you have a circle. You feed a hen eggs in food, and the hen gives you other hens in eggs, and the circle keeps going around and around, but you must supply fuel to run the machine. There has to be eggs put into the hens and then you will get eggs out of the hens.

Somebody in "Gleanings" said: "Gleanings" always has things in it that are so, and things very wise, and sometimes, a small illustration. There was an old man, who, in his condemnation of his poultry business, said he had hatched



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320 chickens and only raised 200. Now, a man who doesn't know any more about raising chickens and hens than that, ought not to go in the business. He ought to keep out of the poultry business and go to something else. Now, I say you must make the poultry comfortable and the first essential of comfort is a comfortable home in which the poultry can live. I experimented a little the winter before last to see if it were possible to increase the egg-production, and have a simple house that was inexpensive. I prepared the roost so that I could drop a curtain right down in front of it. They say hens should have air. I believe they should have some air. Every night I went out to my biddies, just like the mother puts the babies to bed; I went out with the lantern, and found them all lined up on the roost in a nice row, and they would talk to me, and I would pull down the curtain and they would stay there perfectly quiet till I went out in the morning; and in the morning one old hen was the first one to begin, and she would talk in hen fashion and get down off the roost ready for her food. I don't suppose they knew any different, and I don't suppose they appreciated it. The fool hen hasn't got sense enough to know when she is warm, but every day she laid an egg. The average farmer expects a hen to lay eggs under average conditions. I presume in Illinois 9-10 of the hens roost in trees, and 9-10 of the men think hens ought to roost about 40 feet, more or less, from the ground in the tree; and when the mercury is down 20 degrees below zero, that she ought to come out of the tree and hunt around in the snow for a dry place and lay an egg as a return for the kindly treatment she gets! Do you know what I would do if I was a hen and got that kind of treatment? I would



EMERSON T. ABBOTT.

swear by the eternals I would never lay an egg. You can't expect the hen to lay under such conditions. She couldn't lay if she wanted to, for it takes all of the hen's vital energy to keep herself warm and live, and she hasn't any extra vital energy for eggs.

Then a word about the hen-roost. The old-fashioned roost was built up on an angle of 45 degrees, and the poles ran one above the other. In the evening when the hens went to roost those poles were loose at one end or the other, and, of course, if they are loose like that at both ends every hen will like the middle best; and every hen wanted to get on the top pole. Hens are a good deal like men, they want to get on the top pole, and when they are trying to get there they don't care a continental whom they knock off. And so the hens start up one after the other, climbing up one on top of another, and you hear them squealing and screeching, and all sorts of noises, and it takes the hens from one to two hours to get settled down, every time. Now, that kind of roost is not the kind of roost to build. The hen-roost ought to be on the level, just as all men ought to be on the level. If I could get the men reduced to proper hen-roost style I would accomplish more for humanity than anything else. We are always try-

ing to climb up above some other. If we all had roosts and had to come home at night and get down on a level, can't you imagine what it would mean for humanity?

Now, then, if you want a hen to lay eggs you must keep her comfortable all the time, and I will tell you one of the things you must do. The average farmer likes a chicken for dinner. He doesn't have to cook it, he doesn't have to pick it; and he doesn't care how much his wife has to work on Sunday, if he can go out to the corner and tell yarns and chew and smoke and have a good time, and come back at half past one or two o'clock with half a dozen of his neighbors and have a good chicken for dinner and have a good, jolly time. He always wants a chicken for Sunday, but he never thinks of catching that chicken. He never thinks about getting the chicken ready. But Sunday comes and he says, Well, we better have a chicken to-day; John Smith is coming over from the store with me, and I think we better have a chicken.

Well, mother says, it is all right; she don't want to cross him; she knows what will come. She goes out; and every farmer in the country has two or three dogs—a little dog, a big dog and a dog between; the old lady picks out the chicken and says to the boy, "Do you see that old, yaller-legged hen; I want her for dinner." The boy says, "All right, I'll have the chicken." And he blows a whistle. The little dog comes, and he says, "Sick him, Tige. Do you see that hen." The hen starts, the boy starts, and the dog starts. Did you ever know one dog to start without all the other dogs joining with him? The middle dog joins in and the big dog and they run through the orchard, and through the barn, and through the cow-shed, and then run back and forth, and finally the old man joins in the chase, and the old woman comes rushing out, and the little dog is hot on the trail, and the hen comes to the fence, and she tries to go through a crack in it, and the old woman grabs the hen by the legs, and she whirls around, and she takes hold of the hen by the head and goes "whizz."

I take what she has done seriously. She has spoiled one hen for Sunday dinner, because a hen that is chased that way isn't fit to eat; and while the chase was going on, do you know what she has done with the rest of the hens in the place? There is the old hen looking out from behind a box, and there is the old rooster over there that looks out and cackles. Now if they have 300 hens they have done something more, they have lost 300 eggs, for a hen has the most delicate, nervous organism of any animal, almost, in existence, and under such circumstances she can not lay eggs. She won't stop right away, but that will be because she can't. If the farmer had 300 hens, the Sunday dinner has cost him 300 eggs, and if they are worth a cent a piece, he has paid \$3 for the hen he had on Sunday that was not fit to eat.

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Now about the diseases of poultry. When I used to lecture in the Farmers' Institute they were always asking me about the diseases. There is only about one disease in poultry that is very dangerous. About the only disease we have in Missouri is roop; that is, the catarrh of the head, and it gets more aggravated until it gets into the lungs, and finally into the blood, and poisons the hen so that she is really not fit to eat; but if taken at the proper time it can be very easily cured. I can tell you how to cure roop. I say it is a disease of the lungs and bronchial tubes, and about the only way to treat it is wholesale. You can't afford to doctor single hens unless they are valuable.

You find the hens are getting diseased, and the way to tell is if they are snuffing. They call it pip, sometimes. You hear it on the roost at night. That is the danger signal. You want to get busy. Get you some sulphur and a kettle, and put some coals in it. Have your hen-house reasonably tight, and when your hens all get to roost put the kettle in the center of the house where you won't burn it up, and throw about half a pound of sulphur onto those coals, and then go out, unless you feel the necessity of the treatment

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yourself; if you do, stay in; staying in 15 or 20 minutes will do more towards curing catarrh or any bronchial trouble than you have than all the doctor's medicine you can take in a thousand years.

Now you can cure your hens by treating them in that way in two or three nights. If it has got so bad that it doesn't disappear, the best thing to do is to cure them with the hatchet; but don't eat them. When they die you throw them over in the alley and then the rest of the hens go and eat them and then you kill and eat the hens. You might as well have eaten the other fellow at the start. Every one of them ought to be buried out of sight, so far under ground it would not be possible for these diseased germs to be carried to other chickens.

A Member—How do you kill vermin?

Mr. Abbott—In order to kill vermin, you must commence in time. You must not let the vermin get there. When you get a whole lot it is pretty hard to kill them; it is a serious proposition. But in order to kill the vermin you must put a little elbow-grease into your roosts; you must have your roost smooth; you must have your hen-house clean. Vermin hatches in the filth; they don't hatch on the hens; they hatch in the filth, and find their way to the hens. Keep the filth out of your hen-house and you won't have any trouble with the vermin.

On motion of Dr. Miller the convention adjourned.

## THIRD DAY—MORNING SESSION.

At 9:30 p. m. Pres. Dadant called the convention to order, and called for reports of committees, but none being ready to report, the question-box was taken up.

### SUGAR SYRUP FOR FALL FEEDING.

"What proportion of shrinkage must be expected in food made of sugar and water in equal parts for fall food?"

Mr. Acklin—Why not say one-quarter?

Dr. Phillips—I tried this and tested the syrup after it had been put in the combs; it had not been sealed, but it was in condition for honey. When I got through and tested the syrup it was 80 percent of it solid.

Mr. Holtermann—Do I understand Dr. Phillips to mean not a change in the specific gravity of the syrup, but there is no loss in weight in storing? If you feed 10 pounds of syrup the colony gains 10 pounds?

Dr. Phillips—I don't mean that. There is a decided loss.

Mr. Wilcox—According to his answer, isn't there a loss of 20 percent, in addition to the water put in?

Mr. Miller—You are taking half and half sugar, and water. When we make syrup, I think it is supposed that about 2 pounds of water to 5 of sugar will make something of about the consistency of honey.

Dr. Phillips—Honey is about 75 or 80 per cent solid. There is a little water of crystallization in sugar.

Dr. Miller—If that should be straight, 2 pounds of water and 5 of sugar, and if you have put in 5 of water and 5 of sugar, when it is evaporated you have lost just 1-3. I am not saying this is reliable.

Mr. Taylor—I think that is not the question. As I understand the question, when you give the bees 10 pounds of sugar and as much water as you please with it, how many pounds of sugar are there when it is stored in the combs? The bees consume some, and if there is any brood, they feed some to the brood; and my answer would be, it depends on circumstances. If there is a large amount of young brood, the loss will be greater. If it is fed slowly the loss will be greater; if it is fed rapidly, and there is no brood, the loss will not be very great.

Mr. Baxter—I would say this is all guess-work.

Mr. Kilgore—As I understand the question, if I have a colony of bees that is almost entirely without honey at the time of entering winter, how much syrup at half and half will I have to give them? When they have manipulated it properly, there will be the regulation quantity in there to winter, that which we considered to be about 24 pounds, and according to Dr. Phillips' test the waste would be about 1-5. In order to have 24 pounds in a colony to enter winter we would have to feed them 30 pounds, half and half.

Pres. Dadant—If they feed thin syrup it will still be thinner when in the cells for winter than if it had been fed thick.

Mr. Kimmey—I am able to state I have tried with 2

colonies, and I took 10 pounds of sugar and thoroughly mixed it with 10 pounds of water, and placed it in a strong colony to obtain capped stores for the winter colonies. With 20 pounds of syrup I got 14 pounds of capped stores. It was done late in the fall after the honey-flow was stopped, as I thought. That was a loss of about 33½ percent.

Dr. Miller—There are two questions: I got one, and Brother Taylor got another. I suspect he has more nearly the right one than I have, and, as he says, the thing will vary very greatly. If you take into consideration the practical question, it was probably intended to ask, how much will you have left for winter stores? It will vary according to circumstances, all the way from a very little loss to an entire loss of the whole business, if you feed it slowly enough. If you say you are going to feed fast, and ask how much you will have left, then you might get something with a definite answer. You feed so much, and you will have so much left, but be sure to put in a good deal more than you count on.

Mr. Kimmey—This was fed to a strong colony and fed all at once.

Dr. Miller—I should expect in that case of Mr. Kimmey's the bees fooled him, and were doing something on the sly, and got something elsewhere.

Mr. Wheeler—A great deal depends on another point, and that is, what time of the year you feed. If it is in a warm part of the season, when a great deal of brood-rearing is going on, a great deal more of the syrup will go into the brood.

Mr. Huffman—I can't just agree with that. As I understand the question, it is, what percentage of shrinkage there has to be when it is going to be sealed over.

Mr. McEvoy—It depends a good deal on the conditions of things. If there is a large quantity of food, and it is fed slowly, it will be nearly consumed; but if you limit the number of colonies and feed with a rush it will not; but don't have it too thin. It will be nearly a half.

Pres. Dadant—This question is misunderstood by some parties. Now, all that the gentleman wants to know in regard to this is, what proportion of sweet there will be in the feed, or in the cells, to what there was when he put it in? I think Dr. Phillips has understood it rightly, and told us the proportion that he found, 80 percent.

Mr. Aspinwall—Certainly, if he found 20 percent less there would be a loss that has gone into the cappings. If not capped over there would be a difference also.

Mr. Wilcox—The chemist has simply given us the percentage of sugar.

Dr. Phillips—This was sugar-fed, absolutely no honey in it, and 50 percent of water in the sugar when it was fed.

Mr. Aspinwall—If there was 50 percent of sugar and 50 percent of water, there couldn't be 80 percent of sugar afterwards.

Dr. Phillips—When this sugar was fed it was half and half sugar and water; when we were through and extracted the result, 80 percent of that was solid.

Mr. Holtermann—I don't think this question is one which should take up a great deal of time, because it is not a practical question. This syrup is too thin for practical purposes, to begin with. If I understand the question, it is, what is left, and if it is of any profit at all, that is the practical side of it.

Mr. R. L. Taylor read a paper on,

## THE HONEY-PRODUCERS' LEAGUE

FELLOW BEE-KEEPERS:—I say fellow bee-keepers, because what I have to say is for *bee-keepers*, and not for our members who belong to what some one has euphemistically called the "allied interests"; for, remember, that we have a strong element in our Association, not directly interested, or, at least, not primarily interested, in the production of honey. I refer to manufacturers of supplies, dealers in supplies and in honey, authors, publishers and editors of apicultural books and journals.

It is scarcely necessary to say that there are some phases of some topics that are of great concern to honey-producers, but of no special concern to the honey-dealers; and so of the others.

But I am compelled to go further and say that the business concerns of the allied interests are hostile to those of the honey-producers. Now, do not misunderstand me. I do not say there is any hostility between you—the honey-producers—and the representatives of the allied interests. Far



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from it. They are good men, strong men, and a necessary part of our Association. I am only calling attention to the fact that in some points our business interests clash. I would have you guard your interests as shrewdly as they guard theirs. They themselves, I am convinced, would not have you do otherwise, for they are upright men and at heart desire your prosperity. You do not always study your own interests as you ought. They, in a fatherly fashion, attempt to guide you, and you are too much inclined to follow blindly. But no man can serve two masters. It is not in human nature that they should adequately care both for your interests and their own when those interests clash. It is a sound principle of law that no man may be judge in his own matter. Burns sounds the same note:

I'll na say men are villains a',  
But och! Mankind are unco weak.  
An' little to be trusted;  
If self the wav-ring balance shake,  
It's rarely right adjusted!

You ask for concrete examples. Well, take this: Soon after the white clover season was over some of our leading journals came out with the usual advice to sell your honey early; that the early sellers got the best prices; and, forthwith, bee-keepers, where they had any crop, were tumbling over each other to get rid of their honey at any price.

The advice was bad for your interests in a year of scarcity, but disastrous in a year of plenty, for nothing is so ruinous as a glut in the market, unless it be the concomitant, to-wit: the piling up of honey in cold, damp warehouses to sweat and crack and become ruined. I don't question the honesty of the advice, but given, I doubt not, on account of a vision clouded by some conflicting interest. Dealing in honey may have been involved, or the desire to stir up the tyro to get rid of his honey lest he in his inexperience should



R. L. TAYLOR.

neglect too long and so give up the business in disgust; for know that it is common to all the allied interests to aim to secure and maintain an ever-increasing constituency of bee-keepers. That this should be accomplished is obviously contrary to the interests of existing bee-keepers. We have room for all earnest, intelligent and stable students of apiculture, who turn in with us because they are birds of a feather. But the majority are not such. They come in thinking to make an easy fortune. They endure but for a time, play havoc with our markets, and then fall out by the way.

Perhaps there are no conditions in which the honey-producer must be more careful to use all his intelligence and caution than in dealing with jobbers and commission men.

If you entrust them with honey, the grading is not right, or the tare is too little, or your weight of the honey is too much on account of which, or by some carelessness or negligence on their part, the true weight of your honey is not accounted for.

If you express any hesitation about intrusting them with your goods—you have little faith in mankind; if you suggest some condition to test their faith in mankind, that is contrary to business principles.

In 25 years' experience I do not remember that I had one fully square deal at their hands, unless I either required prepayment or delivered the goods in person, until this year; and yet I believe they were honest men—self the wavering balance shook. This year I found the exception that proved the rule. Rather against my judgment, I made a considerable shipment because I lacked time to dispose of it as I have heretofore found most satisfactory. In due time, the report came that the honey arrived in fine condition, that the packing and grading were above criticism, with a check for a larger sum than my bill called for. Perhaps I ought to give the name, but he is present and such men are modest.

Another point! Some of you no doubt have already learned that in the matter of supplies your interests and the interests of the dealer are antagonistic. Some say the dealers in supplies have formed a trust to control prices, or at least have an understanding, that amounts to the same thing. But I am bound to say that as yet I am not ready to go so far, for to form a combine is unlawful, and therefore dishonorable, and I take them to be honorable men. And as yet, it is not to be denied that there are many things that seem to point to a combination. Once one could easily get a reduction from published prices, but now if he suggests it he hardly gets a civil answer. Then there is a constant tendency to crowd prices up unnecessarily. In the case of sections this is perhaps most noticeable. Not many weeks ago a manufacturer of supplies dilated in one of our journals on the outlook for sections. Timber was getting scarce and more costly, so that the price of sections must go up. Indeed, the prospect was that basswood and one-piece sections must go out, then four-piece sections must come in at another advance of 75 cents a thousand; and a sub-editor and a bee-keeper responds in substance, Let them go up; we can stand it.

But we can't stand it if they are not worth it, *i. e.*, if the profits are too high. I have what is to me satisfactory proof.

Within the last 18 months I have bought just 25 M. sections, partly one-piece but mostly four-piece. The dealer said he could let me have the one-piece at \$2.70, but the four-piece did not cost so much to make and he could sell them at \$2.50 a M., and those were the highest prices I paid. And this was not a sacrifice sale. The sections were not only all No. 1, but they were made to order.

One reason of the high prices is the branch houses, and the immense amount of advertising done by dealers. You pay for these luxuries without receiving any equivalent for your money.

Another curious argument is used to boom the price of sections. The honey-producer can afford to pay the prices because he gets a higher price still for them when he sells them with the honey. How millennium-like this would sound: Section comb foundation 15 cents a pound only, because the bee-keeper cannot get more than that when he sells it with the honey.

To illustrate how carefully the supply dealers belonging to the allied interests look after their own profits when the interests of the honey-producer intervenes, let me give one or two more items. Information comes to me from a manufacturer of a certain line of supplies that he was arranging to give members of this Association a large reduction in the price of his line of goods. When news of this movement got abroad, he was communicated with by a representative of a company prominent as supply dealers and members of the Honey-Producers' League, with the result that he was compelled to withdraw from the arrangement; the immediate consequence of which withdrawal was that for the time being at least you were compelled to pay for a line of goods much used by honey-producers, a price almost 50 percent higher.

Again, I am credibly informed that glass for shipping-cases could have been bought recently at the factory in small lots at \$1.50 a box, but an extensive dealer also connected

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with the League, who no doubt buys much cheaper in large lots, sells the glass at \$2.75 to \$3.00 a box—almost, perhaps quite 100 percent on what he pays. No tender regard for the interests of the sweating honey-producer shines forth from profits of such magnitude.

But time and space fail, and what has all this to do with the Honey-Producers' League, anyway?

This League was organized ostensibly to create a larger demand for honey and to hunt down lies about it. But startling to tell, 5 of the 7 offices of the League are filled by men connected with the allied interests, and the strength of the League is from the same source.

So I have written all this to help inculcate the counsel of Captain Standish in Longfellow's "Courtship of Miles Standish":

"If you wish a thing well done you must do it yourself; you must not leave it to others."

If you neglect the counsel as he did, and send someone else to do your courting, you will surely lose Priscilla. Who is to be benefited by the working out of the plan proposed?

Would you expect to increase the consumption of wheat by advertising? But honey has been known as long as has wheat. Advertising cannot change the tastes of the people, nor increase their capacity for consumption, nor make honey a necessity.

The course proposed is admirably calculated to pique the curiosity and thereby lead many of the ultra optimistic who have a little leisure, to embark upon the apicultural sea. And that is for the good of the allied interests, and doubtless what they want. But do you honey-producers want it? I can see how it would decrease the price of honey, but I cannot see how it would tend in any way to increase it.

What has advertising done to influence the price of honey heretofore? Only the other day Mr. Doolittle, in an article, asks. Why the difference in the price of honey 30 years ago and now? He makes the reduction from 28½ cents to 10½ cents. He does not attempt to answer the question, but I can, and to my own satisfaction at least. It was about that time that the advertising of honey and the honey business began to assume some magnitude, and ever since the advertising has increased yearly and the price of honey has as steadily decreased.

One pretext for the organization of the League is that we need assistance in the disposal of our honey. I know of no such necessity. No one of experience has, I think, any difficulty in disposing of his honey. Insist on an unmanipulated market; ripen your honey well before moving it; get it to the consumer, or to some one directly interested in getting it to the consumer, and there will be no glut in the honey market.

We are informed, too, that the League is to chase the *ignis fatuus* of manufactured comb honey. In my opinion the longer it is pursued the bigger it will look. If let alone it will die. I never yet saw a person that even suggested that comb honey could be artificial. It is impossible for any intelligent person to examine a case of comb honey and believe that it might be artificial.

Traveling salesmen are charged with the lies. They are great jokers, and invent wonderful stories, and will repeat them so often and so long as they will incite or irritate or frighten any one. Disregard their stories and they will drop them.

But if the plans of the League were in all respects unexceptional, why divide our forces? Can any sensible reason be given for it? In division there is weakness. I only quote from an article of our president-elect when I say: The National Association is the proper channel through which all national reforms for bee-keepers should be secured.

R. L. TAYLOR.

Dr. Miller—Mr. President, we are told it is not a good thing to have someone else do our courting. I am not sure about that. I never got any body else to court for me I succeeded very well all alone, and on that account I suppose Mr. Taylor thinks every thing else ought to be done alone. But everything is not *courting*; there is such a thing as my doing something that nobody else might help me at. If I were to try to court a girl, and deputized one of you to go and see her, it is not assured at all that her affections would remain true to me; but if I owed a man \$50, and some other man goes and pays \$25 of that debt for me, will you explain how that is going to hurt me?

Let me throw some of the saw-dust aside and see what milk is in the cocoanut. Here a number of men got together and said to us, We want the truth told about honey. They got some \$1,400 together, and they said what they wanted that used for was to create a larger demand for honey through advertising in newspapers and magazines, its great value as food, and by such other methods as may be considered advisable to the Executive Board. Also by publication of facts concerning the production of honey to counteract any misrepresentation of the same.

Now, do you object to an editor telling the truth about honey in his paper because he is not a bee-keeper, because he will do it free? Suppose he is one of these iniquitous (?) supply manufacturers, if he offers you money you are glad to have it in your Association. If he is willing to pay a dollar to get some editor to tell the truth about honey, don't you want him to do it? It seems to me this is all in the air, yet there is a feeling of that kind, and that these men said, We don't want any misunderstanding. I know I am the President of this iniquitous (?) concern under fire now, the chief devil of the lot, and I know that those men, unless they fooled me, were entirely honest in saying that the truth ought to be told. You were looking for their motives. Now I think I can understand them I confess there is a nigger in the fence I don't see. But I can see this, I think: Here is a supply manufacturer, a supply dealer, anything that hurts the bee-keepers to make less sale of honey or lower the prices of honey, hurts his business. If he can help bee-keepers by having the truth told about honey he is helping himself. If there is that sort of feeling, a new and better use can be made of that money. I am going to read you a resolution made before I knew whether Mr. Taylor was going to be on one side or on the other side:

"We, the Executive Board of Honey-Producers' League, propose (subject to the approval of the majority of the League's members) to turn over to the National Bee-Keepers' Association the funds now in the League's Treasury (about \$1,300) provided that such funds when received by this Association shall be used for the purpose for which they were originally contributed in the Honey Producers' League. Further, we would recommend, if these funds are so accepted, that a sub-committee of the National be appointed to expend the same."

Mr. Holekamp—I am one of the Executive Committee or Board of the League. I am a bee-keeper, nothing else, and I believe in advertising, and I believe it takes more money than we can get out of the bee-keepers for this purpose, therefore, I thought it was a good thing if the supply men would help in this matter. The supply dealers are benefited probably more than we are through this advertising, inasmuch as the supply dealer can sell no goods unless we can sell honey at a profit. The more honey we can sell the more goods the supply dealer can dispose of. I don't believe the supply dealers in furnishing this money had any other thought than to increase the sale and price of honey for the bee-keepers, and therefore I was willing when I was asked to go on the Executive Board, to take this place. I had been asking to do more advertising to increase its funds. But after coming here I heard that there was a feeling that if there was anything done with it, it was unfair to the bee-keepers, and, therefore, it is probably better to have the matter done the way it has been proposed, and I voted in favor of doing this. I think we can help ourselves. I know it by my own feelings. I began keeping bees for pleasure, and I used to give my honey away, but my crop was so large I had to dispose of it. I didn't know what to do with my honey until I began to advertise, and, since I am advertising, people are getting the honey from my house. So I believe advertising does us good, and I do not believe the supply dealer has anything else in view other than the benefit that is to help us and to help themselves.

Pres. Dadant—In this matter, if we wish to take the proposal of The Honey-Producers' League, we cannot accept or reject it, but we can recommend to the Board of Directors of the National Association to accept it, or take a vote upon it through the members of the National. We are a very small percentage of the entire membership, and we can pass anything that will stand for the approval of the members. A motion made here, recommending the acceptance or rejection, as you see fit, will undoubtedly have an influence upon the Board of Directors. Therefore a motion now would be in order.



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Dr. Miller—As a member of this Association, I move that we recommend that the proposition of The Honey-Producers' League to take over from them this money (some \$1,300), to be used by us, and to have a committee arranged to expend it in the way proposed, be accepted and that this be recommended to the Directors.

Mr. Smith—I second the motion.

Mr. Wheeler—I sell honey in Chicago. I go personally to the trade, and in that way I get at the feeling of the people as some men do not. As far as I can see, and know, the people all know what honey is, and they know that the honey they are getting in Chicago labeled as pure honey is pure honey, and they know that the comb honey on the market is comb honey, and pure honey. If this honey is pure I don't think that the labels or printed matter sent out by The Honey-Producers' League, or this National, should bear the names in large letters of the officers.

Pres. Dadant—The question is whether they should accept or reject.

Mr. Wheeler—I want to tell you what The Honey-Producers' League has done. This League goes before the public with their circulars put into comb-honey supers, and saying so and so, and then at the bottom they put the name of somebody that is interested in the sale of honey the same as I am. I am a member of the League and of the National, and if this League goes into the National; and if the officers of the League are to be at the head of this department, and use their names there to advertise their goods, I am placed in competition with my own brothers in the same society.

Dr. Miller—I rise to a point of order. He is mentioning something that would not be the case.

Mr. Wheeler—I want to be placed on this market in Chicago on an equal footing with every member of the National Bee-Keepers' Association. I am willing to take my stand on my own goods and guarantee them, but I must not be put in competition with a man in the same society that I am supporting.

Mr. York—I think Mr. Wheeler said he was a member of the Honey Producers' League. I don't find his name on the list.

Mr. Wheeler—No. I said if the Honey-Producers' League joins the National I will be a member of both.

Pres. Dadant—No. The League will be destroyed.

Mr. Muth—If the National Bee-Keepers' Association takes that money and insists upon the names of all these Directors, then I would call that tainted money, and I would certainly be in favor of not accepting their money under any condition. I want to advertise my business, not Mr. York or Dr. Miller or the Lewis Company or Mr. Boyden, or any of the Honey-Producers' League or National Bee-Keepers' Association. I wouldn't have the money under any circumstances.

Mr. Johnson—As I understand this question, the effect of this motion, if passed or rejected will amount to this: Whether this Honey-Producers' League shall die right here and we shall take that money, or whether we wish them to continue on and try to do good in advertising honey. I am a member of The Honey-Producers' League, and I produce honey. I have no objection to the League. These people that have not paid anything, it does not cost them anything, and I don't see what objection they can have. The Honey-Producers' League can't harm in advertising honey, and I would like to wish them well, and let them go on and see what they can do.

Mr. Scott—I would like to ask a question: Who has ever intimated that the officers of the Honey-Producers' League should become some of the officers of the National Association? Who has ever intimated anything more than that The Honey Producers' League wishes to turn over the money to the National?

Dr. Miller—That Dutchman right there (Mr. Muth); he says if those names are going to be on, which is intimating those names will be on.

Mr. Kimmey—If I understand it, this money is offered us to use in a certain manner. I think we better accept the money first, and then after that if we are afraid we will be injured in our business by the names of the officers of the National Association being put upon the notices, that is a matter to be considered afterwards.

Mr. Hershisier—I have lost interest in this proposition since it was first presented to the bee-keepers, about a year

ago; I haven't any really clear recollection upon the matter now, but at that time I couldn't see they were ever going to be able to help me. They proposed to raise the price of honey, as I remember it, but the point to which they proposed to raise it was below the point I am able to sell at. I believe if every bee-keeper will take the same pains to advertise his goods that some of us do, this League can not help them. As I see it, the far Western fellows are raising the price of their honey from 3 to 5 cents a pound, by bringing it down to compete with me; I don't want that done; if they will let me alone I will take care of that question.

Mr. Taylor—This Association has a constitution that provides for the expenditure of any money in their hands for the interest of the bee-keepers. Why is it necessary that there should be a condition put in this motion to embarrass the Association after it receives the money? We have a very distinct article in our Constitution that practically covers the same ground, and if this condition is put in, it will only give rise to further discussion and wrangling as to what is the meaning of the condition. I move that the motion be amended by striking out the condition.

Mr. Muth—I second the amendment.

Dr. Miller—The question is, why should you receive the money with the condition attached? Simply this: That money was handed to us for the express purpose which I mentioned to you—to be used for advertising. Now, if the money should be handed over to be used for some other purpose, the man who handed it to us for advertising would not have his wish carried out. If you won't take this gift on our terms, we won't give it.

Mr. Taylor—I want to put this motion in such a position that the Association can vote on it without a condition. If we adopt this motion without the condition it doesn't necessarily follow that we get the money. In the adoption of the motion in that form, if it should be adopted, they can refuse to hand over the money. It is simply a question as to the form in which this Association is willing to receive money. Do they desire to receive it with the condition, or untrammelled? It seems to me if we are going to have the money that the Association ought to have it so that they can handle it without being trammelled.

The question was called for.

The President put the amendment which on a vote having been taken was declared lost.

The President then put the original motion, which, on a rising vote, having been taken, was declared carried unanimously.

The Secretary read a communication from F. E. Brown, giving the report of the National Honey-Producers' Association, as follows:

## To the National Bee-Keepers' Association Assembled—

GENTLEMEN:—As it will not be possible for me to be with you at this convention, and as chairman of your committee to organize a National Honey-Producers' Association for the marketing of our product, I take this opportunity to make my report.

I beg to say that the committee found that the producers of honey from every center are anxiously looking and inquiring for our success, and without an effort on our part, many hundreds of dollars were offered for stock as soon as it should be issued. However, we moved carefully and judiciously that the child born at St. Louis convention and named: "The National Honey Producers' Association of America," should have a good "constitution" to build upon; this matter the committee did much hard and effectual work on, but was greatly handicapped, being scattered from the Atlantic to the Pacific; this made the work go rather slowly, and as we were about to make a grand finish, with incorporation papers nearly ready to file, to our great surprise, something, or someone, gave birth to the League. While the latter is not a child of the National Bee-Keepers' Association, yet it is in her house under the same roof, partaking of the nutritious substances that should have gone to the National's legitimate child, until the committee could see no room for both to grow and prosper, and have decided to give away to the League. This is done with much regret, for, as producers of honey, we believe that better results would come to the bee-keeper if they should market their own products, rather than have it done by publishers and manufacturers. The one who produces honey, should also have some say what price he should get for it. This can only be done by associating

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ourselves together in a national way as bee-keepers, not as dealers. It is only natural that dealers, either individually or collectively, will strive to sell us, as bee-keepers, our supplies, and then to buy or sell our honey, thus dictating prices both ways. BEWARE!

Therefore we will have to give up another good work, allow another grand opportunity to pass by, which we fear will not soon again return.

Respectfully submitted,

F. E. BROWN, *Chairman.*

Mr. York—I think Mr. Brown is mistaken, because the League did not interfere with the National Association.

## REPORTS ON INCORPORATION.

Mr. Abbott—The majority of the Committee on Incorporation of the National Association have decided that it is not wise to incorporate under present conditions. The Committee is composed of 5, and 2 were in favor of incorporation and 3 against.

## REPORT ON EXHIBITS.

We, the committee, find the following articles on exhibition:

By N. E. France—Samples of 60 kinds of honey from nearly every State in the Union; also from Japan, Portugal and Peru.

Mr. Clyde Cady—Section honey in pasteboard sections.

R. F. Holtermann—12-frame Langstroth hive, with portico, and screen for moving bees—double door for ventilation, cell-detector and packed cover.

The A. I. Root Co.—Full line of bee supplies.

Twin Baby Nuclei, by Arthur Stanley.

Twin Baby Nucleus, by A. K. Ferris.

Hive by Doland Sherburne.

Wax-extractor by O. L. Hershier, with 1½ pounds of wax from 18 pounds of slumgum, from the German wax-press.

A selection of comb and extracted honey by Louis Werner.

A hive by unknown exhibitor.

Super of honey by unknown exhibitor.

Samples of honey in 4 x 5 sections by Theodore Fluegge.

Seven-inch comb-honey case of 24 sections, N. E. France.

MORLEY PETTIT,

A. K. FERRIS,

E. J. BAXTER,

*Committee.*

## REPORT ON RESOLUTIONS.

*Resolved*, That the National Bee-Keepers' Association in convention assembled do hereby tender a vote of thanks to the Chicago-Northwestern Association and friends for the fine hall and accommodation for the entertainment of this convention.

*Resolved*, That the convention tender a vote of thanks to all who have prepared papers for this meeting.

*Resolved*, That this convention recognize the great help which Federal and State Government can accomplish by bringing the people the value of honey as a food, and the method of utilizing and keeping the same and in connection therewith, we would heartily approve of the issue of such bulletins as No. 140, on "Uses of fruit, vegetables and honey," issued by the Department of Agriculture for Ontario, Canada; and that a vote of thanks and appreciation be tendered the Honorable Nelson Monteith, Minister of Agriculture for Ontario, Chief of the Department, and that a copy of these resolutions be sent to him.

*Resolved*, That it is the sense of this meeting that the Board of Directors be requested to publish the pamphlets directed to be published at the meeting of the National held at St. Louis last year.

Mr. France stated that the pamphlets spoken of were referred to at page 74 of the report of the St. Louis convention.

Pres. Dadant put the motions to approve the various resolutions presented, which votes having been taken, were declared carried.

## REPORT ON AMENDMENTS.

The committee have put their report in the form of a question as follows: "Is it advisable to divide the territory of the National Bee-Keepers' Association into districts and have each district elect one director?"

What will you do?

Mr. Holekamp, in speaking to the motion, suggested that if the country were divided up into 12 or more districts, as might be considered advisable, and have each district elect a delegate who would be expected to look after the welfare of that district, and to look after the increase of membership, that he believed much more good would be accomplished than was being done at the present time. He thought the membership could within two years be made 10 times as large as it is at present.

Mr. Moore supported that view and presented the following resolution, duly seconded:

*Resolved*, That it be the sense of this convention here assembled that we recommend that it be an amendment to the Constitution, that there shall be a representative upon the board for each State in the Union, and for each Province in Canada; the resolution to be submitted to the membership in proper form.

Mr. Hatch was in favor of decreasing the number of members upon the Board of Directors rather than increasing it.

Mr. Kluck expressed the opinion that if a Director were elected from every State in the Union that the Association would have a body so cumbersome that they would not accomplish anything.

Mr. Moore stated that he thought it would meet the views of every person to add to the general motion that the Board of Directors shall elect from among themselves an Executive committee, one for each 10 members of the Board of Directors.

Sec. Hutchinson stated that he did not see any use in having directors that did not direct; he thought it would be a good thing if the territory were divided into districts, and every State which had 200 members would elect a director, and every group of adjoining States making up 200 members, would elect a director; that he would support such action.

Mr. France stated that the Association did not want any larger Board than they at present had, but he suggested that the territory be divided up in proportion to the number of members, and if that was done something would be accomplished.

Mr. Abbott moved that the following be substituted for the motion before the house:

*Resolved*, That a committee of 3 be appointed by the chair, one of which shall be from Canada, to divide the United States and Canada into as many districts as there are now Directors in the National Association, having as near as possible an equal number of members from each district, according to the Report which is about to appear, and that thereafter these districts be permitted each to elect their own director.

After some discussion the President put the motion to substitute Mr. Abbott's resolution for the resolution offered by Mr. Moore, which, on a vote having been taken, was declared carried.

Some further discussion followed on the substitute after which Mr. McEvoy moved, seconded by Mr. Taylor, that the motion be laid on the table.

The President put the motion, which, on a vote having been taken, was declared carried.

(Continued next month.)

**Please Send Us Names of Bee-Keepers** who do not now get the American Bee Journal, and we will send them their subscriptions, for which work we offer valuable premiums in nearly every number of this Journal. You can aid much by sending in the names and addresses when sample copies. Then you can very likely afterward get writing us on other matters.

**Appendix to Dr. Miller's "Forty Years."**—All who have the first edition of "Forty Years Among the Bees" should also have the Appendix which appears in the new edition, issued recently. The complete new 344-page book, bound in cloth, is sent postpaid for \$1.00; the Appendix alone for 10 cents. Or, the book and the American Bee Journal a year—both for \$1.80; the Appendix and the American Bee Journal a year in advance, \$1.00. Send all orders to the American Bee Journal office.



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## Bees Have Done Well

My bees have done very well this season. They have 3 or 4 hive-bodies stacked on, and they are all full of honey. I have had no time to attend to my bees properly, and so have taken no honey off yet.

L. C. Medkiff.

Oceanville, N. J., Aug. 23.

## Swarming in August and Later

I am now having prime swarms every day. As my bees rarely omit the afterswarms when they "prime" once, and as it is the 14th now, I seem to be booked for worry and watching clear through August, if not into September.

Toledo, Ohio, Aug. 14. E. E. HASTY.

## Poor Honey Crop

The honey crop is poor. I got good results early from locust and white clover, but after June 20 the flowers yielded no nectar, on account of change in atmosphere. This same thing occurred last year, just 5 days later.

Green Mount, Md., July 31. H. H. FLICK.

## Worst Honey Failure

I have 16 colonies of bees, and have not had a swarm this season. I have not seen a live drone in my yard this year. It has been the worst honey-failure I ever saw. There are lots of bees in this locality, but I have not heard of a pound of surplus honey being taken yet.

Eureka, Ill., Aug. 25.

## What Determines the Sex of a Queen's Eggs?

Whether a drone hatches from an egg which has been fertilized, as was suggested on page 719, I do not know. However, there are some things that are rather apparent. When a queen thrusts her body into a worker-cell it fits her snug enough to bring it in a position so that the egg receives a certain fertilizing fluid which makes it hatch a queen or worker. While a drone-cell, being larger, allows of a more free course or passage of the egg; it does not receive the certain treatment which the other egg does, and hence hatches a drone. It is possible to find out a great many things about bees yet.

SEPAL.

## Honey-Dew from the Oak-Trees

The letter from Mr. C. P. Dadant, on page 553, concerning "Honey-Dew Without Aphides," encourages me to send the following communication. Only after having seen that a gentleman of such high standing in bee-culture as Mr. Dadant wrote the referred to communication, I feel encouraged to give for publication what follows:

As already said in my report about our crop prospects here in Southern California (page 568), we have had most extraordinary weather from Jan. 1 till even now. For 12 years I have kept a daily weather record, and by comparing dates I have become convinced that such peculiar weather conditions have not as yet existed in the 12 years referred to. The weather was unusually cloudy and cold all through April and May. I was much surprised to find that the insect world this year was exceedingly poorly represented, there being hardly any ants, wasps, spiders, bugs or beetles worth speaking of, when, in other years, and especially in 1905, they were so abundant. I incline much to the opinion that all suffered in the same or a similar way from the cold during the nights, as it was

with the bees in many locations when the brood got chilled; and others may have been drowned by the exceedingly heavy rains.

Now as regards honey-dew. I have made the identical observations as described by Mr. Dadant, yet not being a professor of entomology, I did not feel as if I should come out with my observations; but now that Mr. Dadant has been first to report about it, I will tell what I have repeatedly seen here.

There are some 30 or 40 big oak-trees (we call them "live-oaks" here) near my apiary and house. Many a cold morning, even before the sun appeared, I have been surprised to see the bees working on the leaves and small acorns; also drops of this dew I have noticed plentifully on the ground, herbs and dry leaves lying on the ground, and seeing that my dogs carefully kept away from these 3 or 4 trees, presumably fearing the bees, my attention was drawn to this dew, and I have repeatedly tasted it, finding the taste exactly such as described by Mr. Dadant. I even had in mind to send a few samples, but gave it up, as the long distance from here to the East did not warrant it. And, further, I have been unable to find a single aphid or any leaf or acorn that had a "dewdrop" on it, and even now I can not see any aphides on these trees. The bees have worked on these oak-trees from early in the morning until late at night, i. e., on such days when the sun did not break through the fog or clouds (and, unfortunately, there were many such days).

I even go so far (perhaps I am mistaken) as to lay a peculiarly harsh taste, which I noticed in some of my honey-sections, to the predominant quantity of this honey-dew or "mielée." This harshness is very much like that of pepper-tree honey.

Even yesterday (July 11) I again found this honey dew, although the drops were much smaller in size, and not so plentiful as during April and May.

DR. PHIL. MAX BOELTE.

Valley Center, Calif., July 12.

## Bees Did Very Well

Bees in this part of the country have done very well this year. My home apiary has stored from 1 to 5 supers of comb honey, mostly from red clover. I have 2 out-apiaries, and they didn't do very well.

THOMAS POUPPIERT.

Basehor, Kans., Aug. 9.

## Poor Country for Bees

Honey is coming in very slowly here in Virginia. I have 1 colony, however, that has gathered 45 pounds of comb honey. I have 8 colonies at present. Virginia is a very poor country for bees or money.

JEFFERSON, Va., July 28.

## Bees Did Well

Bees have done well in this locality. Some of my colonies have filled 4 supers. They have worked continually from fruit-bloom until July 20. Buckwheat and sweet clover are about done blooming. I look for a good honey-flow the last of this month and September, as we have the yellow blossoms, and late buckwheat and heartsease.

GEO. E. MORAN.

Earlton, Kans., Aug. 6.

## Some Honey and Prospects Good

I took out of the cellar 30 colonies of bees on April 7, 1906, and lost 7 afterwards. I have 45 colonies now, and also a lot of good honey. The prospects are good at present.

JOHN COATES.

Dunn Co., Wis., Aug. 3.

## Heavy Extracting Combs of Honey

In taking off extracting stories this morning, I noticed some very heavy—in fact, so heavy they called for the wheelbarrow. I placed one on the scales to see about what it contained, and it tipped the scales at 116

pounds. This was a single story with 11 combs in it. The empty combs weighed 23 pounds, leaving 93 pounds of honey—all snow-white.

If there is any other bee-keeper who can show a greater weight of honey in 11 combs, I would like to hear from him.

Jackson county has a fair crop of honey.

Jackson, Mich., Aug. 3. W. D. SOPER.

## Abundance of Clover

There are very few bee-keepers in this locality, although we have an abundance of clover—red, white and alsike. I have taken off 72 pounds of honey so far, and expect to get about 4 or 5 more supers full from old colonies, but will not get any from this year's swarms.

I read the American Bee Journal with great interest, and could not keep bees without it.

I winter my bees on the summer stands. I just put a little tarred paper around them to keep the rain off, of which we have plenty in the winter here in Oregon.

O. J. PETERSON.

Astoria, Oreg., Aug. 3.

## 60 Tons in 1905—This Year Only 6

Our honey season is over. Last year we had 60 tons of honey, and only 6 tons this year; and have 1000 colonies in 3 apiaries.

J. F. MCINTYRE.

Ventura Co., Calif., Aug. 2.

## Bees Doing Fairly Well

My bees are doing fairly well. I had 11 colonies, spring count, and hived 3 swarms for myself and sold 2 to a friend. That is all the swarming I have had so far. I have taken 150 pounds of comb honey already, 44 pounds from 1 colony in a double chaff-hive, and the supers are about all full at present. I sell all my honey at home at 20 cents a pound, and have no trouble to dispose of it.

I can not be without the American Bee Journal, for there is where I get most of my information.

We have a very wet spell at present, and expect a good fall honey-flow.

GEO. M. SMIFERT.

South Bethlehem, Pa., Aug. 4.

## A Guess at Non-Swarming Secret

I would like to make a guess at that new kink of Davenport's, for curing the swarming fever. My guess is that he requeens the colony with a virgin, the particular *modus operandi* likely being about as follows:

First visit, removes the old queen and places a caged virgin in the hive; and second visit, releases the virgin.

I note he says there is no searching for queens nor removing frames, yet it is evident he gets her from what he says in answer to Mr. Philbrook, page 603.

If it is desired to let the colony requeen itself instead of the caged virgin, a queen-excluding honey-board may be slipped in under the hive on the bottom-board and allowed to remain until a virgin hatches and settles the difficulties.

Of course, I am only guessing, but I thought I would give the fraternity an idea to work on. I have noticed that this kind of requeening works like a charm for me when successful, but I am not expert enough to get there in proper shape every time.

It seems that at this particular time (swarming-time) the bees have very erratic notions about their queens—in fact, a desire on the part of some of the bees to supersede the queen seems to be a large factor, if not the principal incentive to create the swarming impulse, and they are after young, vigorous blood—"A virgin, if you please. We are tired of the old mother."

Davenport says, "No searching for cells." Of course, a buxom young virgin will attend to that better than any man, provided she is

# American Bee Journal

duly installed and gets there before any of the cells begin piping. I have noticed that each cell has a concourse of bees that seem to have their hearts set on that particular cell, and all the force of their dailing affections is aroused when the cells begin piping. The only hitch is to know the times and seasons, and be able to read the symptoms. I do not know how Davenport determines that the time is ripe for treatment without looking for cells, but I would judge it would not be necessary to wait for cells. The advancement of the season, the age and condition of the old queen, the congested condition of the colony, the demurely looking aspect of the bees, etc., I would think would be sufficient to warrant the treatment in anticipation of what was likely to follow, and perhaps it would be easier to introduce a strange queen (virgin) a little in advance of cell-construction. I don't know; I never tried it just that way. My plan—a plan I have followed in a few cases—is to introduce a cell.

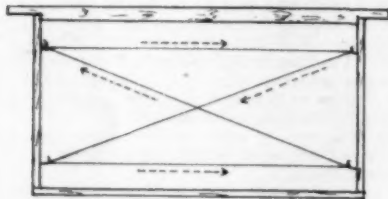
I have no secrets in the bee-business. I greatly appreciate the bee-papers. I feel very grateful to the Editor and all the writers for the assistance they have given me. I never expect to be able to tell enough to repay them. If I could I would gladly do it a thousand times over. If I were in Mr. Davenport's place, I simply could not rest easy, that's all. Out with it, Mr. Davenport. Peace of mind is better than all you will ever gain by secrecy.

W. T. CARY.

Wakenda, Mo.

## Method of Wiring Brood-Frames

Here is my method of wiring frames: Nails  $\frac{3}{4}$ -inch long are driven through the end-bars  $\frac{3}{4}$ -inch from the upper and lower ends of the



end-bars, and bent into a hook with small pliers. The wires will not spring the end-bars then, nor will they cut into the wood and become slack, but will remain as you leave them.

G. BOHRER, M.D.

Lyons, Kans.

## A Beginner's Experience

Bees did well. I am a beginner in bee-keeping. Last spring at the opening of fruit-bloom I had 4 colonies, of which 3 were in bad condition, and being afraid they would not do well I united the 2 into 1 hive with success. The 2 other colonies being in good condition I started in with 3 colonies, from which I got over 200 pounds of comb honey. I now have 4 colonies, as I had last spring, by increasing 1.

I would like some experienced bee-keeper tell me how I can make an increase next summer to about 15 or 16 colonies, provided these 4 colonies winter well.

WALTER M. ADEMA.

Berlin, Mich., Aug. 2.

## A Dry Summer

My colonies came through last winter with very little stores and few bees. I lost over half of them, yet I fed all winter with outdoor feeders. Had I not done so the loss would have been much greater. I have had no swarms this year. I have run for extracted honey mostly, and have a fine lot of nice, white honey ready to take off. It has been very dry here this summer, and the result will be we will get but little dark honey, as there is very little heartsease to be seen anywhere. The third crop of alfalfa is now coming on nicely.

J. J. MEASER.

Hutchinson, Kans., Aug. 4.

## CONVENTION NOTICES.

**The Southern Bee-Keepers' Association** will meet in Atlanta, Ga., Oct. 11 and 12, 1906, during the State Fair, on the Fair Grounds. All interested are invited to attend.

JUDSON HEARD, Sec. and Treas.  
J. J. WILDER, Pres.

**National in Texas.**—The National Bee-Keepers' Association will hold its annual convention Nov. 8, 9, and 10, 1906, in San Antonio, Texas. These dates occur at a time when the Texas Fair is in progress, and low rates will be in force, locally, for several hundreds of miles out of San Antonio, and, at the same time, there will be home-seekers' rates available from other parts of the country.

Flint, Mich. W. Z. HUTCHINSON, Sec.

**Michigan.**—The second annual picnic of the Northern Michigan Bee-Keepers' Association will be held at Petoskey in the Petoskey Park—directly east of the Arlington Hotel—Wednesday, Sept. 12, 1906. Our first was a decided success and we want this to be as much so. Come, and bring a full basket and bring your family and ask your friends also, and spend a day in the beautiful Petoskey. Write E. E. Coveyou, of Petoskey, for any information regarding same.

IRA D. BARTLETT, Sec.

**The Western Illinois Bee-Keepers' Association** will meet at the Court House (County Court room) at Galesburg, Ill., Thursday, Sept. 20, 1906. We have had such a very poor honey year that many are discouraged, but remember we have all the more need for a good, lively convention. The dry year of 1901 was followed by two exceptionally good years for bee-keepers. None of us was ready for them. Let's get all the information we can, and get ready for the good years that are coming. Messrs. C. P. Dadant, George W. York and J. Q. Smith have promised to be with us, and you will all be made welcome if you come. Don't miss this convention. Come and bring your wives with you. Meeting begins at 9 a.m. and lasts all day.

J. E. JOHNSON, Pres.

E. D. WOODS, Sec.

**Missouri.**—The annual meeting of the Missouri State Bee-Keepers' Association will be held at the Circuit Court Room at Marshall, Mo., Oct. 2 and 3, 1906. All bee-keepers are invited to attend and to join the Association. This is going to be an important meeting, as steps in preparing for the canvass of the State in the interest of the foul-brood bill to be brought before our Legislature at its session next January are to be considered. Elaborate preparations are being made by the Saline County Bee-Keepers' Club for the reception of bee-keepers, and badges are being prepared, and will be sent to all those applying for them to the undersigned Secretary, or to Mr. M. E. Tribble, at Marshall, Mo., Secretary of the Saline County Bee-Keepers' Club, to facilitate the reception committee in taking care of the bee-keepers on arrival of the trains. Hotel accommodations can be obtained at reasonable rates, or board and lodging can be secured at 50 or 75 cents per day at private boarding houses, for those who will write to Mr. Tribble, asking him to arrange for them. There are over 41,000 bee-keepers in Missouri. Let there be 1000 of them at Marshall, Oct. 2 and 3.

ROBERT A. HOLEKAMP, Sec.

4263 Virginia St., St. Louis, Mo.

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- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

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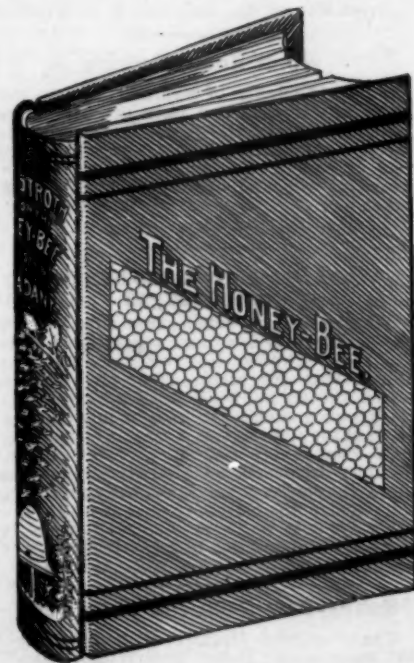
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During September I will offer a discount of 7 percent on Supplies for next season's use. In October the discount will be 6 percent. Cash must accompany order.

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INDIANAPOLIS, IND.

## SPECIAL OFFERS for Sept. and Oct. ONLY

Cloth-bound Dollar Books  
for 60 cents each

ALSO

A 75c Book and a 75c Queen for 25c each

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No. 1 The Bee Journal a year with Dr. Miller's cloth-bound "40 Years Among the Bees" (book alone \$1)—both for \$1.60.

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Remember, that each is a separate offer, and must be taken before Nov. 1, 1906. If you want the advantage of these special prices.

If more of the same kind of Queens are wanted, order at these prices during September and October: 3 for \$2.00; 6 for \$3.75; 12 for \$7.00. Now is the time to re-queen. Or, we will send 1 Queen Free as a Premium to any subscriber (whose own subscription is paid up at least to the end of 1906), for sending us \$1.00 and the name and address of a NEW subscriber for 1 year. Address, (13 copies), sent for only 20 cents. Regular price is \$1 a year.

GEORGE W. YORK & CO., 334 Dearborn St., Chicago, Ill.

All our Special Offers always apply only to the U. S. and its possessions, Canada, Mexico and Cuba.

## Bee-Keepers

If you want Sections that you can put a full sheet of foundation in 4 sections at once; or any other Bee-Supplies, send for Catalog to

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A. COPPIN, Wenona, Ill.

WE SELL ROOT'S GOODS IN MICHIGAN  
Let us quote you prices on Sections, Hives, Foundation, etc., as we can save you time and freight. Beeswax Wanted for Cash.

M. H. HUNT & SON,  
BELL BRANCH, WAYNE CO., MICH.

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# American Bee Journal

## BEE-SUPPLIES

We manufacture everything needed in the Apiary, and carry a large stock and greatest variety. We assure you the best goods at

### LOWEST PRICES

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Just Received a LARGE CONSIGNMENT OF

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— Two in a Case. —

The cans are just as good as new, and we are offering them for quick sale at the following prices:

In lots of 5 cases of 2 in a case... 50c a case	In lots of 25 cases of 2 in a case... 40c a case
" 10 " 2 " 45c "	" 50 " 2 " 35c "
In lots of 100 cases of 2 in a case... 32c a case	

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25A6t

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Is what we are making for our customers.

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**Queens** A fine Honey-Gathering Strain of Italians and Carniolans, at 75 cents each; 3 for \$2; 6 for \$3.50; or \$6.50 per dozen, for Untested. Tested, \$1 each, or \$10 a dozen.

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Seven heads Turnips, Motherwort, Catnip at 5c per package, postpaid; 24-lb. Shipping Cases complete with glass, 14c each.

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Choice home-bred and imported stock. All Queens reared in full colonies.

Prices of Italians in JULY AND AFTER:

One Untested Queen.....	\$ .65
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1 Un. Caucasian Queen, 1.25	
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Safe arrival guaranteed.

For prices on larger quantities, and description of each grade of queens, send for free catalog.

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## Italian and Caucasian Queens

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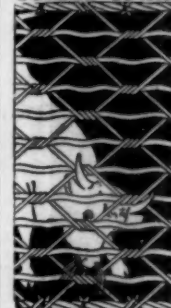
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None better at any price. Untested at 50c; Warranted at 75c; Tested at \$1.00. Discount on quantity.

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and sold direct to farmer, freight prepaid, at lowest factory price. Our Catalogue tells how Wire is made—how it is galvanized—why some is good and some is bad. Its brimful of fence facts. You should have this information. Write for it today. Its Free.

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That covers the whole Apicultural Field more completely than any other published, send \$1.20 to

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Capon Book Free.

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## Special Summer Tourist Rates

via Nickel Plate Road, to Canadian and New England points. Fifteen day limit one fare plus Two Dollars from Chicago; thirty day limit, one fare plus Four Dollars from Chicago. On sale September 5th and 19th. For reservation of sleeping-car berths, etc., write or call at City Ticket Office, 107 Adams Street, Chicago. 26—35A3t



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Something New.

Something You Want.

Our specially prepared Gloves soften the hands and prevent and cure chapped hands. The fabric contains a preparation which prevents the gloves from becoming hard and stiff. We furnish them without armlets or sleeves for using in sweeping, gardening or general housework, driving or outdoor work. They are just the thing for driving in the rain, as they are absolutely waterproof. If worn at night they keep the hands soft and white.

All the points of excellence can not be here enumerated, but they never fail to give the greatest satisfaction. To introduce them, we will send by mail, or with other goods, at the following low prices:

Bee Gloves, long arms, fleece-lined, in two sizes—large for men, small for ladies. .35  
Men's Gauntlets, fleece-lined. .35  
Ladies' .35  
Ladies', unlined, for wearing at night or during doing light housework. .40

Early Order Discounts on Bee-Supplies (excepting above and a few other articles) as follows:—

7 percent for cash with order before Oct. 1st	6 " " " " " Nov. 1st
5 " " " " " Dec. 1st	4 " " " " " Jan. 1st
3 " " " " " Feb. 1st	

If you haven't our 1905 catalog, send for one and a free copy of the American Bee Keeper (50c a year). Address,

THE W. T. FALCONER MFG. CO.  
JAMESTOWN, N. Y.

## Honey and Beeswax

CHICAGO, Aug. 6.—There is now offered some good lots of comb honey, and while the trade in it is not active, it is taken at 15¢@16¢ for fancy, 14¢@15¢ for No. 1, 12¢@13¢ for fancy amber, and 8¢@10¢ for fancy dark. Extracted is slow of sale with prices according to quantity and quality. White extracted, 6¢@7¢; amber, 5¢@6¢; dark, 5¢@5½¢. Beeswax, 30c.

R. A. BURNETT & CO.

TOLEDO, Aug. 20.—The market on honey has not changed much since our last quotation. Bee-keepers seem to be holding their goods expecting large prices. Fancy white comb brings in a retail way 16¢@17¢; No. 1, 15¢@16¢, with no demand for dark. Extracted white clover, in barrels and cans, brings 6¼¢@7¢; but very little has been offered as yet. Beeswax, 26¢@28¢.

GRIGGS BROS.

INDIANAPOLIS, July 28.—Fancy white comb brings 16¢@17¢ readily; No. 1, white, 2c less per pound; the demand is not supplied, but higher prices would decrease the demand. Best grades of extracted honey bring 8¢@9c. Good average beeswax sells here at 33¢ per 100 pounds.

WALTER S. POWDER.

PHILADELPHIA, Aug. 9.—Advices from different points are rather conflicting in regard to the honey crop this season, and, consequently, there is no market price established. Some new arrivals of comb honey sell at 13¢@15¢, according to quality, and extracted at 6¢@7c. Beeswax firm, 28c.

We are producers of honey and do not handle on commission. WM. A. SELSER.

NEW YORK, Aug. 18.—There is a good demand for new crop comb honey, but arrivals are very small as yet, and will continue so for a week or two to come. We quote fancy white at 15c; No. 1 white at 14c; No. 2 white at 12c; it is too early as yet for dark or buckwheat. Extracted is in good demand at 6¼¢@7c for white, 6c for light amber, and 5¢@5½¢ for dark. Southern, common average grade, 50¢@55¢ per gallon; better grades at 60¢@65c. Beeswax firm at 30c.

HILDRETH & SROGLEN

CINCINNATI, July 21.—We are having new comb honey to arrive and it finds ready sale; fancy white at 14¢; and No. 1 at 13¢. Extracted, white clover, in barrels, at 7¢; in cans, 8¢; amber, 5¢@5½¢. Beeswax, 30c.

C. H. W. WEBER.

# Headquarters for Bee-Supplies

## WANTED—HONEY

White Clover Extracted and Comb. Mail sample and state lowest price expected, delivered in Cincinnati. We pay cash on delivery.

Let me book your Order for

## QUEENS

LANS, RED CLOVERS and CAUCASIANS.

For prices, refer to my catalog, page 29.

# C. H. W. WEBER

CINCINNATI  
... OHIO ...

Office and Salesrooms, 2146-48 Central Ave. Warehouses, Freeman and Central Aves.

KANSAS CITY, Aug. 20.—The demand for comb honey is improving, but receipts light. No new extracted in the market. We quote No. 1 white 24-section cases, \$3; No. 2 white and amber 24-section cases, \$2.75. Extracted, 5¼¢@6c. Beeswax, 25c.

C. C. CLEMONS & CO.

DENVER, July 30.—Some small lots of new comb honey coming in now; crop promises to be light. At the present we are selling No. 1 white at 83.25 per case of 24 sections; No. 2 at 83. We are paying 24¢ per pound for clean yellow wax delivered here.

THE COLO. HONEY-PRODUCERS' ASSN.

CINCINNATI, Aug. 18.—Fancy and No. 1 comb honey find ready sale at 14¢@15c. Shipments arriving daily. Lower grades are not wanted here at any price. There is a good demand for extracted honey; amber in barrels and cans, 5¢@6¢; white clover, 6¼¢@8c. (These are our selling prices.) Beeswax, 28¢@30c.

THE FRED W. MUTH CO.

## Jelly Tumblers at Reduced Prices

YOU CAN DOUBLE YOUR MONEY from your honey crop by using JELLY-TUMBLERS OF CORRECT STYLE, as containers and keeping your market supplied. No other glass so economical. Write for quotations. OREL L. MERSHNER, 301 Huntington Avenue, - BUFFALO, N. Y. 34A4t Please mention the Bee Journal.

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Editor and Publisher

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## WANTED

To buy for cash, Fancy Comb and Extracted Honey.

R. A. HOLEKAMP, 31A13t 4263 Virginia Ave., St. LOUIS, MO.

Mention Bee Journal when writing.

## HONEY AND BEESWAX

When consigning, buying or selling, consult

R. A. BURNETT & CO.

199 SOUTH WATER ST. CHICAGO, ILL.

## WANTED

To hear from parties with their lowest cash price, delivered here, for fancy comb honey in no-drip shipping cases; also extracted honey. We are cash buyers, and remit on receipt of goods.

THE FRED W. MUTH CO. 27A4t 51 Walnut St., CINCINNATI, OHIO.

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## Queen-Clipping Device Free!

The MONETTE Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. It is used by many beekeepers. Full printed directions sent with each one. We mail it for 25 cents; or will send it FREE as a premium for sending us One New subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device. Address,

GEORGE W. YORK & CO., CHICAGO, ILL.

## One Fare for Round Trip

from Chicago, plus Two Dollars, for fifteen day limit, and one fare for the round trip, plus Four Dollars, for thirty day limit, to Canadian and New England points. Tickets on sale via Nickel Plate Road, from Chicago, September 5th and 19th. Information given upon application to John Y. Calahan, General Agent, 107 Adams Street, Chicago. La Salle Street Station, Chicago—the only depot on the elevated railroad loop.

25—35A3t

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New Crop Honey, comb and extracted, in any quantity. If you have a crop to dispose of, write us fully as to quality, quantity, style of package, etc., and you will have our answer by return mail. If we should fail to come to an understanding as to price, we may arrange to handle your crop on consignment, feeling confident that we can do you justice in every respect.

## WE WILL SELL

to Bee-Keepers, whose crop is not large enough to supply their trade, various grades Honey. Let us know your wants and we will do our best to satisfy you.

## BEESWAX

We are in the market to buy Beeswax at any time of the year. Write us when you have any to sell.

**HILDRETH & SEGELKEN**

265 & 267 Greenwich Street

NEW YORK, N. Y.